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	Gold, base-metal, and related deposits	
9	of North Carolina	
10	by	
11	Gwendolyn W. Luttrell	
12	U.S. Geological Survey Open-File Report	
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Gold, base-metal, and related deposits

of North Carolina

#### Abstract

Gold, silver, copper, lead, zinc, pyrite, tink, cobalt, molybdenum. tungsten. barite. and rare-earths have been mined in North Carolina. Gold, with by-product silver, occurs in veins and mineralized shear zones in metamorphic rocks of the Piedmont province and in placers derived from these deposits. Copper occurs with complex sulfide ores in quartz veins in the metamorphic rocks of the Piedmont province and in massive pyrrhotite-pyrite deposits in crystalline rocks west of the Blue Ridge. Lead and zinc occur in complex ores of gold, copper, lead, zinc, and silver in veins and replacements in metamorphic rocks. Pyrite occurs in crystalline metamorphic rocks. Tin occurs in pegmatite and placer deposits in crystalline rocks near Kings Mountain. Cobalt minerals with ores of iron or gold have been reported in a few areas in the Piedmont. Molybdenum occurs along the borders of a granite body in Halifax Tungsten minerals occur with copper sulfide ores in Cabarrus and Vance Counties. Barite occurs in quartz veins and associated with sulfide minerals in Orange, Madison, Cleveland, and Gaston Counties. Rare-earths occur with sulfides in veing deposits in Cabarrus County.

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Introduction

This report is a compilation of published and unpublished information on deposits of gold, silver, copper, lead, zinc, pyrite, tin, cobalt, molybdenum, and tungsten, barite, and rare-earths deposits associated with sulfide mineralization in North Carolina. An attempt has been made not to overlook any of the more than 800 mines and prospects which have been described in the literature of the past 150 years in order to bring together as complete a record as possible of precious - and base-metal mines of the State. It is 10- hoped that this collection of descriptions of and references to the mines will facilitate the work of others who may wish to make detailed studies of the mines and their geological relationships.

The gold and base-metal deposits of North Carolina occur in two of the three physiographic provinces of the State, whose geographic limits are defined by topographic relief, northeastward trending structures, and weathering characteristics of the rocks. The provinces are, from east to west, the Coastal Plain, in which no metallic mineral deposits are found, the Piedmont province, a mature plateau of well-rounded hills and long rolling ridges dissected by older streams which have developed its topography, and the Appalachian Mountains, a highly dissected mountain plateau bounded on the east by the Blue Ridge Mountains which rise as a precipitous escarpment 1,500 to 2,000 feet above the Piedmont, and on the west by the Unaka and Great Smoky Mountains.

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The rocks of the Piedmont province are divided into igneous and metamorphic, metavolcanic, metasedimentary, and sedimentary groups. Gneisses and schists, granites, and malic igneous rocks occur throughout the Piedmont, vary greatly in age, and appear to be largely of igneous origin. The metavolcanic rocks occur in the Carolina Slate Belt, which actually consists of two parallel northeast-southwest trending belts, one lying across the central part of the State and the other along the eastern edge of the Piedmont. The metavolcanics of the Carolina Slate Belt are divided into three felsic volcanics including rhyolite-and dacite tuffs and breccias, majic volcanics including andesite to basalt flows and fragmentals, and volcanic slates and bedded argillites. It is in the rocks of the Carolina Slate Belt that the quartz veins containing important deposits of gold and base metals are found. Metavolcanic rocks occur also in the Grandfather Mountain Window area, which lies partly in the Piedmont and partly in the Blue Ridge. Here the rocks are metadiabase, schist, and metarhyolite. The metasedimentary rocks of the Piedmont are the Kings Mountain and Stokes Belt, consisting of two groups, one of highly siliceous slates, phyllites, and sericite schist, and one of highly calcareous crystalline limestones, dolomites, and metashales. Two belts of sedimentary rocks of Triassic age occur in the Piedmont province.

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In the Blue Ridge and Appalachian Mountains the rocks are granites, granite gneisses, and malil igneous rocks of the igneous and metamorphic group, metavolcanic rocks of the Mt. Rogers group, metasedimentary rocks of the Brevard Belt and Murphy Belt, and sedimentary rocks of the Ocoee Series of upper Precambrian age, and of Cambrian age in the Hot Springs and Grandfather Mountain windows.

The mines and prospects here described are divided into groups based on mineral assemblages. These groups are: gold-quartz veins, gold placers, shear zones mineralized with gold and/or base metals, copper-bearing quartz veins, massive pyrite and pyrrhotite=pyrite with base metals, and barite veins. There are also minor deposits of tin, cobalt, molybdenum, tungsten, and not rare-earths. In general these groups of deposits are clear-cut, and gradations are found from one type to another.

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Gold occurs in veins and mineralized shear zones and in placers derived from these deposits. Most of the gold mines and prospects occur in six main belts, which are from east to west: 1. the Eastern Carolina Belt, including Franklin, Halifax, Nash, and Warren Counties, where gold deposits occur in quartz veins in saprolite, 2. The Carolina Slate Belt, including parts of Person, Granville, Vance, Union, Anson, Alamance, Orange, Davidson, Rowan, Cabarrus, Randolph, Lee, Chatham, Moore, and Montgomery Counties. deposits in this belt occur in veins and placers in altered volcanic rocks, 3. Carolina Igneous Belt, including parts of Guilford, Davie, Davidson, Rowan, Cabarrus, and Mecklenburg Counties. Here the deposits are veins and mineralized zones in granite and igneous rocks and placers derived from these. 4. Kings Mountain Belt, including parts of Cleveland, Gaston, Lincoln, and Catawba Counties. Here the country rock is crystalline gneiss and schist with lenticular bodies of siliceous dolomitic limestone and quartzite. 5. South Mountain Belt, including parts of Burke, McDowell, and Rutherford Counties. Quartz veins occur in an area of metamorphic gneisses and schists intruded by acid igneous rocks. 6 Western Belt, west of the Blue Ridge Mountains including parts of Ashe, Watauga, Henderson, Transylvania, Jackson, Clay, and Cherokee Counties, where gold veins and placers occur in gneisses and schists. Silver occurs in small amounts in native gold and in the complex gold-base#metal sulfide ores.

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Copper deposits occur in three northeast-southwest trending zones

1. The Western Zone, west of the Blue Ridge, including Ashe, Jackson,
Haywood, Clay, Macon, and Swain Counties, contains massive sulfide

bodies and fissure veins in crystalline schists and gneisses of the

metamorphic group. Most of these deposits were formed by hydrothermal

solutions during several stages and were replaced and recrystallized

during later metamorphism. 2. Central Zone, in the Central Piedmont,

including Guilford, Cabarrus, and Mecklenburg Counties, where mixed

sulfide veins in acid crystalline and related granitic rocks of the

Carolina Igneous Belt contain copper and gold. 3. Eastern zone,

including parts of Cabarrus, Rowan, Stanley, Davidson, Chatham,

Granville, and Person Counties, in the Carolina Slate Belt. Included

are the copper-gold deposits of the Gold Hill, Cid, and Virgilina

districts.

Lead and zinc sulfide ores and their alteration products occur associated with pyrite, copper sulfides, and gold, throughout the State.

Pyrite occurs in a belt of metamorphic rocks extending from New Hampshire to Alabama in which pyrite and related minerals occur in lenticular deposits. This belt passes through Gaston County.

Tin veins in pegmatite and placer deposits derived therefrom occur in the Kings Mountain Belt of Gaston and Cleveland Counties.

Cobalt occurs as asbolite, a cobalt-manganese oxide, in several localities in Wake, Gaston, and Lincoln Counties.

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Molybdenite occurs with pyrite and chalcopyrite in quartz veins and disseminated in granite in Halifax County.

Tungsten occurs in North Carolina in two principal localities, in Cabarrus County associated with copper-gold mineralization, and in Vance County in mineralized quartz veins.

Rare-earths occur in a complex gold-copper sulfide deposit in C Babarrus County.

The descriptions of individual deposits were compiled from information in the lighterature and from unpublished data. The locations of some deposits are not given exactly in the literature, and in a few instances conflicting locations had to be reconciled. Many of the deposits have had several names in their history, and all of the names are given. Little information is available on many mines beyon their location and principal minerals, but these deposits have been included both to make the record of mining as complete as possible, and to aid in showing the distribution pattern for different types of metallization. In some deposits for which only the location and principal product are given in the literature, the host rock and type of deposit have been deduced from other information available, such as geologic maps or information on nearby deposits. Only general descriptions of ores, rocks, and structures are given. The absence of production data does not necessarily imply that a mine did not produce, but only that there is no record of production. Mines and prospects are arranged in the text alphabetically by name; in Appendix I they are listed alphabetically by county. A list of the mines and prospects in order of location number is printed on Plate I.

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Aberdeen (Horney Ridge) mine
1
     Type: Gold, copper
2
     Location: Guilford County, at Jamestown,
3
          This is the most northerly of a southwest-northeast trending
 5-
     group of mines opened on a 3 mile long quartz vein in granite near its
     eastern contact with schists.
7
     References: C. B. Brown, 1934, written communication;
                  Nitze and Hanna, 1896, p. 115;
 10-
                  Pardee and Park, 1948, p. 76.
11
     Abernathy mine
 1
     Type: Gold
     Location: Catawba County, 6 miles east of Maiden.
     Reference: Nitze and Hanna, 1896, p. 151.
 5-
6
18
     Abernathy, Clem, mine
 1
      Type: Gold
 2
     Location: Mecklenburg County, 8 miles northwest of Charlotte.
 3
      References: Nitze and Hanna, 1896, p. 132;
  5 -
                   Pardee and Park, 1948, p. 63.
 6
```

```
1
     Abrams, Pattie, mine
     Type: Gold
2
3
     Location: Polk County, South Mountain area.
 5--
          Gold placers.
6
     Reference: Nitzcand Hanna, 1896, p. 174.
7
      Adams mine
 1
      Type: Gold
      Location: Polk County.
3
      Reference: Pardee and Park, 1948, p. 64.
 5-
14
      Adams mine
 1
      see Hazel Creek mine, Swain County.
2
18
     Alden and Merrill mine
1
      Type: Gold
2
     Location: Moore County,
3
            Gold was produced here in 1903.
 5 --
      Reference: Pratt, 1904, p. 11.
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Alexander (Chapman) mine
1
     Type: Gold
2
     Location: Mecklenburg County, 8 miles northwest of Charlotte, and
3
          3/4 mile east of Derita, on the south side of the road. —
          A quartz vein carrying sulfides and carbonates occurs in sheared
6
     granite. The length of the vein is 900 feet, and it has been worked
7
     to a depth of 110 feet. In 1934 many pits and shafts were seen
R
     scattered over an area 1/4 mile in diameter.
 10-
     References: Bryson, 1936, p. 122-123;
11
                  J. V. Lewis, 1934, written communication;
12
                  Kerr and Hanna, 1888, p. 298;
13
                  Nitze and Hanna, 1896, p. 139-140;
14
                  Pardee and Park, 1948, p. 63.
 15-
1
       Alexander, Amos mine
2
       Type: Gold
       Location: Mecklenburg County, northwest of the Ferris mine, about
3
            6 miles north of Charlotte.
 5-
6
            The ore contained gold and pyrite.
7
                   Genth and Kerr, 1881, p. 111;
       References:
                    Nitze and Hanna, 1896, p. 143;
 10-
                    Pardee and Park, 1948, p. 63.
```

```
1
       Alexander, Martin, mine
2
       Type: Gold
      Location: Mecklenburg County, 6 miles northeast of Charlotte and 1.4
           miles southeast of Derita. ____
 5-
           One of a group of 4 shafts, 50 to 60 feet deep, was reopened
6
7
       about 1934.
      References: J.V. Lewis, 1934, written communication;
 10-
                    Pardee and Park, 1948, p. 63.
11
      Alexander, Moorehead, mine
1
      Type: Gold
2
      Location: Mecklenburg County, 9 miles northeast of Charlotte. —
3
      Reference: Pardee and Park, 1948, p. 63.
 5-
18
1
       Allen mine
            See Lalor mine, Davidson County ___
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### Allen mine

Type: Gold

Location: Moore County, 1,050 feet northeast of the Burns mine, and

500 feet southwest of the Red Hill mine.

The ore body is a silicified zone about 35 feet wide striking N.25°E, and apparently an extension of the Red Hill vein. The mine was developed by a 40-foot shaft with drifts driven along the strike.

Reference: Conley, 1962a, p. 25.

## Allen and Baldwin prospects

Type: Tin

Location: Gaston County, about 1 mile southwest of the Metcalf prospect and 1/3 mile northwest of the Hastings prospect, on opposite sides of the public road, the Baldwin on the southwest side and the Allen on the northeast side.

Cassiterite occurs in greisen gangue in lenticular shaped bodies of pegmatite muscovite schist and gneiss and hornblende gneiss country rock. A 45-foot shaft was sunk at the Baldwin prospect, and two pits were made at the Allen prospect.

References: Keith and Sterrett, 1918, p. 145-146;

Kesler, 1942, table 18.

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1
      Allen-Boger mine
      Type: Gold
 2
      Location: Cabarrus County, 4 miles north of Cabarrus Station and 2
 3
           miles south of Rocky River; where the Concord Road crosses the
           Mount Pleasant road, about 8 miles from Concord.
  5--
           Coarse grained diorite containing hornblende needles 1/2 inch
 7
      long, epidote, chalcopyrite, and quartz was seen on the dumps in 1934.
 8
      Tetradymite and azurite were reported in 1881. Pits and trenches
 9
      extended for a distance of 375 feet in a N. 25° E. direction.
  10-
11
      References: Emmons, 1856, p. 202-205;
12
                   Genth and Kerr, 1881, p. 95;
. 13
                   Pardee and Park, 1948, p. 70.
14
     Prospect 2,225 ft. N. 70° W. from Allen prospect
 1
 2
      Type: Tin
 3
      Location: Gaston County
  5--
           Two bodies, 175 feet apart, contain cassiterite in greisen gangue
 6
      enclosed in hornblende gneiss wallrock.
 7
     Reference: Kes$ler, 1942, table 18.
 8
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Allison mine
1
      Type: Gold
2
      Location: Cabarrus County, at the southwestern city limits of Concord
3
 5-
           In 1934 shallow pits in biotite granite and diorite were seen.
6
7
      References: C. B. Brown, 1934, written communication;
                   Pardee and Park, 1948, p. 62.
 10-
1
     Allison prospect
      see Brinkley prospect, Jackson County
 15--
16
17
18
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Allred (Burns, Overton, Randolph) mine 1 Type: Gold 2 Location: Randolph County, 10 miles northeast of Asheboro. — 3 The ore bodies are lenses of ferruginous quartz sericite schist 5in dark green andesitic tuff country rock of the volcanic series. 6 The lenses are arranged in 4 zones or "veins". The surface is covered by saprolite. The mine was worked before and after the Civil It was opened for a short time in 1906, and again in the 1920's, when a 10-stamp mill was erected. A number of open cuts extended for 10-1/4 mile along a northeast trending belt 400 feet wide. In 1934 11 Mr. A. J. Bowers tested and milled material from the Saprolite layer. 12 A channel sample across a width of 8.5 feet assayed 0.02 ounce of ' 13 gold per ton, and a sample of limonite-pyrite material assayed 0447-14 ounce per ton. Considerable trouble was encountered in trying to 15-save the gold due to its fineness and to the nature of the clayey 16 material in which the gold occurs. 17 18 References: C. B. Brown, 1934, written communication; 19 Bryson, 1936, p. 71; 20-Pardee and Park, 1948, p. 88; 21 Pratt, 1907, p. 45. 22 23 24

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Allred, Billy, mine

Type: Gold

Location: Davidson County, 3/4 mile northeast of Silver Hill.

A rusty quartz vein in acid sheared tuff was seen.

References: C. B. Brown, 1934, written communication;
Pardee and Park, 1948, p. 62.

#### Alred mine

See Burns mine, Moore County

Alston mine

Type: Gold

Location: Warren County, about 16 miles southeast of Warrnton, on

the plantation of Edward Alston;

Gold occurs in quartz veins in salrolite derived from white micaeous granite, and in placers resulting from the weathering of the veins. Gold was first discovered here in 1847 through the finding of a nugget in the road. An area of more than one acre had been worked by 1907.

keference: Crosky, 1907, p. 854-855.

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Alta (Monarch, Idler, Carson, Glendale) mine 1 Type: Gold Location: Rutherford County, about 5 miles north of Rutherfordton, 3 on the divide between Cathey's Creek and the Second Broad River. 5--Veins of milky quartz carry free gold, pyrite, and chalcopyrite. 7 The ore contains from 1 to 20 percent of sulfides, and from \$10 to 8 \$30 per ton of gold. The four larger veins, known as the Monarch, 9 Carson, Alta, and Glendale, were worked from 1845 to about 1894 by 10shallow open cuts, pits, and shafts. A shaft on the Alta vein was 11 105 feet deep. There was a 5-stamp mill on the property in 1894. 12 13 References: Bryson, 1936, p. 141-142; 14 Nitze and Hanna, 1896, p. 169-170. 15~ Ammons Branch (Horse cove) placer 1 2 Type: Gold 3 Location: Macon County, on Ammons Branch, 4 Gold placers. 5 --6 Reference: Pardee and Park, 1948, p. 63. 23 24

Annie Maud prospect 1 Type: Copper 2 Location: Granville County, about one-half mile south of the old 3 Blue Wing Post Office. 5 --A narrow quartz vein in Virgilina Greenstone contains chalocite 6 in a gangue of epidote with some quartz. A shallow pit was put down 7 on this persistent quartz vein which extends both to the northeast and southwest. It was part of the William M. Pannebaker estate in 1917. 10-11 Reference: Laney, 1917, p. 156. 12 13 Anthony mine 1 Type: Gold Location: Alamany County, 3 Reference: Genth and Kerr, 1881, p. 91. 19 20-21 22 23 24

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# Appalachian (Coggins, Rich Cog) mine

Type: Gold

Location: Montgomery County,  $1\frac{1}{2}$  miles north-northeast of Eldorado.

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Mineralization occurs along shear zones in sericitized, chloritized, and silicified argillaceons slate. Sulfide minerals are disseminated throughout quartz veins and lenticular mineralized zones up to 50 or 60 feet long. Free gold is found in the upper weathered zone. The mine was discovered in 1882 and has been operated intermittently since that time. A 40-stamp mill was built in 1887, and by 1890 the mine was 200 feet deep. In 1896 the mill was moved to the Jones mine in Randolph County. In 1911 the Whitney Company operated the mine as the Coggins mine and treated the ore in a 40-ton lave mill. In that year the mine was one of the principal gold producers in North Carolina; but the mill burned in 1912, stopping production. Between 1913 and 1916 the mine was operated as the Rich Cog mine and the ore was treated in a 10-stamp mill. 1919 the mine had reached a depth of 550 feet. It is estimated that more than 65,000 tons of ore worth \$5 to \$7 per ton, and 3,000 tons of ore worth \$9 per ton were extracted between 1922 and 1925 and treated in a 50-stamp mill. The mine was closed in 1926, but was unwatered, mapped, and sampled in 1934. It is estimated that the total yield of the mine was at least \$100,000 (5,000 ounces of gold).

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1
      References: Bryson, 1936, p. 73-74;
2
                  Conl#y, 1958, p. 60; 1962, p. 17;
                  Drane and Stuckey, 1925, p. 29;
                  Kerr and Hanna, 1888, p. 252;
 5-
                  Nitze and Hanna, 1896, p. 76;
6
                  Nitze and Wilkens, 1897, p. 53;
                  Pardee and Park, 1948, p. 81-82;
                  Pratt, 1914, p. 22, 49-61.
     Arey mine
1
     Type: Gold
2
     Location: Cabarrus County, 6 miles southeast of Concord, and 3 1/4 miles
3
          southwest of Mount Pleasant.
 5-
          A 6-inch thick quartz vein carrying limonite, pyrite, and
6
     bornite was being explored by a 36-foot shaft in 1934 by Mr. W. M.
7
     Arey.
     Reference: Pardee and Park, 1948, p. 70.
10-
20--
     Argo mine
1
     Type: Gold
2
     Location: Nash County,
3
     Reference: Pardee and Park, 1948, p. 64.
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Arlington mine
1
     Type: Gold
2
     Location: Mecklenburg County, 6 miles west of Charlotte.
3
 5-
          The outcrop was prominent and large, but of very poor quality
6
     and the ore bodies in depth were not regarded as favorable. The mine
7
     was worked to a depth of 100 feet in 1883.
8
     References: Kerr and Hanna, 1888, p. 293-294;
 10-
                  Nitze and Hanna, 1896, p. 133;
11
                  Pardee and Park, 1948, p. 63.
12
1
     Arms, Tom, mine
2
     Type: Gold
3
     Location: Polk County, South Mountain area.
 5-
    Reference: Nitze and Hanna, 1896, p. 174.
      Arringdale mine
 1
      Type: Copper
 2
      Location: Person County, 2½ miles northwest of the Durgy mine.
 3
            A few prospect pits and shafts were sunk on quartz veins.
 5 --
      work was soon abandoned because of the poor showings.
      Reference: Laney, 1917, p. 158-159.
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Arrington mine 2 Type: Gold Location: Nash County, 1 mile southeast of the Portis mine. included 2,000 acres of land extending 2 or 3 miles down Fishing Creek. (808) The exact locations of the Arrington and Mann-Arrington mines in Nash County, and the Nick Arrington and Mann mines in Halifax County are not known, but all are said to be near the portis mine. possibility is suggested that these names may refer to different parts of the same tract or mine. This mine is believed to be in the same belt with the Portis mine. 11 12 References: Bryson, 1936, p. 62; Kerr and Hanna, 1888, p. 241; 14 Nitze and Hanna, 1896, p. 27; 15-Pardee and Park, 1948, p. 64. 16 17 Asheboro mine See Jones mine, Randolph County 2 22 23 24 25

Atlas Mine 1 2 Gold Type: Rowan County, the southwestern continuation of the Location: Dutch Creek veins, 4 miles east of Rockwell. -5-Low-grade chalcopyrite - pyrite ore carrying gold occurs in quartz veins in siliceous granite country 7 rock, which is sheared and converted to quartz-sericite schist near the veins. 10-References: Kerr and Hanna, 1888, p. 283; 11 Nitze and Hanna, 1896, p. 121; 12 Pardee and Park, 1948, p. 92. 13 Axel's Shaft on Marble Creek 1 Type: Gold 2 Location: Cherokee County, near Marble Creek, a tributary of Valley River, 3½ miles northeast of Murphy. 5 --Gold associated with galena occurs in marble of the Ocoee series. 7 Reference: Nitze and Hanna, 1896, p. 193. 22 Bailey mine 1 See Hamilton mine, Ansow County 2

```
1
    Baker (Baker Hill) mine
2
     Type: Gold, lead, silver
3
    Location: Caldwell County, on the western slope of Davis Mountain,
          near John's River, about 5 miles northwest of Hartland.
 5-
6
          Quartz veins in schistose county rock near a dike of diabase,
7
    largely altered to serpentine, contain gold with argentiferous galena
8
    and ferruginous matter. One vein was hard quartz, 18 inches wide and
9
    coated with stolzite and pyromorphite. Another vein 2 to 4 feet wide
    strikes N. $5°-45° W. The saprolite on the surface and the nearby
11
    stream gravels were rich in placer gold.
12
         The mine was in full operation in 1857 and was described as a
    silver-lead mine by Kerr and Hanna in 1887. The date of its opening is
14
    not recorded. The four principal veins which were developed are the
    Brasswell, Goley Ann, Shaft, and Cabin veins. In 1906 there was a
16
    110-foot shaft, a 42-foot shaft, and 13 small shafts or pits, and a
17
    210-foot cross-cut tunnel. The last record of work was in 1911.
18
19
    References: Bryant and Reed, 1966, p. 7;
 20-
         Bryson, 1936, p. 138;
         Kerr and Hanna, 1888, p. 203-204;
21
22
         Nitze and Hanna, 1896, p. 177;
                                             Nitze and Wilkens, 1897, p. 17/7;
         Pardee and Park, 1948, p. 62;
23
        Pratt, 1907, p. 36; 1914, p. 19.
24
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Bald Knob mine
1
2
    Type: Gold
    Location: Caldwell County, about 1/2 mile south of the Batker mine,
         at John's River.
 5-
      A Awartz vein 4 feet thick in schistose county rock.
7
8
    References: Nitze and Hanna, 1896, p. 177;
9
                 Pardee and Park, 1948, p. 62.
      Ball mine
1
2
      Type: Gold
      Location: Guilford County, near Jamestown,
     References: Nitze and Hanna, 1896, p. 116;
 5-
                   Pardee and Park, 1948, p. 62.
6
    Baltimore mine
1
     Type: Gold
2
     Location: Davidson County, 3 miles north of Silver Hill.
3
         The ore was oxidized to a depth of 60 feet. Below that level
 5--
     pyrite, carrying chalcopyrite, galena, and gold occurs in a quartz
6
     vein in chlorite and sericite schist derived from tuff. The mine was
     prospected long before 1880. About 1880 it was cleaned out and the
     shaft was retimbered. A few tons of ore were taken out.
9
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References: C. B. Brown, 1934, written communication;

Pogue, 1910, p. 108.

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1
     Baltimore and North Carolina mine
2
     See Ray mine, Mecklenburg County.
1
      Bame (Graf, Holshouser, Jacob Holtshauser)
2
                   Gold
      Type:
3
                   Rowan County, southwestern continuation of the Dutch
      Location:
                   Creek vein; 4 miles east of Rockwell,
 5-
                         The ore is low grade, in veins which strike
                    N. 350 - 400 E., and with nearly vertical dip. The
                    quartz veins carry chalcopyrite and pyrite with gold
                    in a country rock of siliceous granite. The mine,
 10-
                    which had been operated in the 1800's, was reopened in
11
                    1903 by the Salisbury Copper Company. There was a
12
                    shaft 40 feet deep.
13
                    Kerr and Hanna, 1888, p. 283;
      References:
14
                    Nitze and Hanna, 1896, p. 121;
 15-
                    Pratt, 1904, p. 20.
19
 1
       Bane mine
 2
       Type: Gold
 3
       Location: Mecklenburg County,
 4
            Gold and pyrite are noted in the ore.
  5 --
 6
 7
       Reference: Genth and Kerr, 1881, p. 111.
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Bangle mine
1
      Type: Gold
2
      Location: Cabarrus County,
3
           Scheelite was found associated with pyrite and chalcopyrite in
 5--
      a gold-carrying quartz vein.
6
7
      Reference: Genth, 1859, p. 246-255.
9
     Barber mine
2
     Type: Gold
3
     Location: Cabarrus County, 1 3/4 miles south of Georgeville.
 5---
     Reference: Pardee and Park, 1948, p. 62.
 15-
16
    Barnes mine
1
    Type: Gold
2
    Location: Alexander County, 8 miles west of Taylorsville.
3
 5- Reference: Kerr and Hanna, 1888, p. 308.
23
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Barnhardt mine 1 Type: Gold 2 Location: Cabarrus County, 6 miles southeast of Concord and 12 miles east of the Faggart mine. -5 --A 5-foot wide quartz vein in diorite or diabase carried galena, 6 chalcopyrite, pyrite, and barntardtite. Barnhardtite, first found at this locality, was described as a new mineral by F. A. Genth in 1855, and was named for the Barnhardt mine. Barnhardtite has since been shown to be chalcopyrite partly altered to chalcocite and covellite 10-(Palache, Berman, and Frondel, 1944, p. 223), but the name persists 11 in the literature. Coarse stream gold also has been found on the 12 property. In 1934 a 4-foot quartz vein was seen in one of two partly 13 filled shafts. 14 15-References: Genth, 1855, p. 17-18; 16 Genth and Kerr, 1881, p. 93; 17 Nitze and Hanna, 1896, p. 123; 18 Nitze and Wilkens, 1897, p. 62; 19 Palache, Berman, and Frondel, 1944, p. 223: Pardee and Park, 1948, p. 70. 20-Barnhardt mine 1 See Gold Hill mine, Rowan County. 24

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1 Barrier mine 2 Type: Gold 3 Location: Cabarrus County, 1 mile southwest of the Phoenix mine, on the same property. Near Bost's Mill and 3/4 mile north of Rocky 5-River. 7 Quartz veins in greenstone schist carry pyrite, chalcopyrite, and 8 gold. The mine was worked before 1860 by Mr. Orchard who opened it to 9 a depth of 160 feet on two veins. In 1893 the mine was reopened and 10a 5-stamp mill was built. Prospecting in 1935 uncovered a vein of 11 iron-stained quartz. 12 13 References: Emmons, 1856, p. 178; 14 Genth and Kerr, 1881, p. 96; Nitze and Hanna, 1896, p. 122-125; 15--16 Pardee and Park, 1948, p. 70-71. 17 1 Barringer mine 2 Type: Gold 3 Location: Mecklenburg County, 3 miles south of west of Charlotte. 4 5 --6 References: Pardee and Park, 1948, p. 63. 25-

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Barringer mine

Type: Gold

Location: Stanly County, ½ mile southwest of Meisenheimer, 4 miles

southeast of Gold Hill, on Long Creek.

Gold occurred in a quartz vein in slate country rock at the contact of a diabase dike. The gangue is said to have been largely calcite. The vein was very narrow and very rich, and much disturbed by faulting. Placer mining was done in the valley of Long Creek and its tributary. The Barringer mine was opened before 1824 and was probably the first gold mine in North Carolina to be opened upon a true gold-bearing vein. Placer gold had been mined for some time on a creek running through the Barringer farm. The vein was discovered by Mr. Barringer, who had observed that beyond a certain point on the creek no more placer gold was to be found, and who thought that perhaps the gold had come out of the hill. He dug into the hillside and discovered a quartz vein rich in free gold. The first day he picked out 1200 dwt. of gold. He mined the vein and later leased it to others. Little is known of the history of the mine during the ensuing 60 years. In 1892 it belonged to Theo. Klutz of Salisbury. In 1902 and for some years following the mine was developed and operated by the Whitney Company, which put down a 204-foot shaft with drifts at several levels. The mine map shows ore shoots adjoining a body of dibase ranging from 20 to 100 feet in aggregate length and extending from the surface to the lower levels. Recorded production

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includes 1,600 to 2,000 penny weights of gold taken by Mr. Barringer
1
     from the vein; and a total of $40,000 in gold up to 1892.
2
     10 bars of gold were shipped, one of which weighed 20 pounds.
4
     References: Bryson, 1936, p. 82;
 5-
                   Kerr and Hanna, 1888, p. 260;
6
                   Laney, 1910, p. 111-112; plan;
                   Nitze and Hanna, 1896, p. 85;
                   Nitze and Wilkens, 1897, p. 32; 56;
                   Pardee and Park, 1948, p. 92-93;
 10-
                   Stuckey, 1965, p. 303-304.
11
12
      Baryte mines
 1 .
             Barite
      Type:
2
      Location: Gaston County, along the east flank of the Kings Mountain
            range from Crowder's Mountain to Yorkville, S. C.
 5-
            The barite ores carry sphalerite and galena with small quantities
       of gold and silver.
       Reference: Kerr and Hanna, 1888, p. 201.
 9
23
24
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Bat Roost Mine 1 Type: Gold 2 Location: Moore County, 1/2 to 3 miles northwest of the Brown mine. 3 5 The ore is similar to that at the Brown mine. Gold occurs in 6 shloritic schist containing quartz lenticles. 7 8 References: Bryson, 1936, p. 69; 9 Kerr and Hanna, 1888, p. 244; 10-Nitze and Wilkens, 1897, p. 57; 11 Pardee and Park, 1948, p. 64. 12 Bear Creek mine 1 Type: Copper 2 Location: Chatham County, east of the Phillips mine, 2.2 miles south 3 southeast from Harpers Crossroads on a paved road, then east on an unpaved road for 0.6 miles. The deposit is north of the road 5-between the road and Little Indian Creek. 6 7 Malachite and azurite were seen on the surface. Prospecting 8 was done in 1942 and 1943 by the Bear Creek Copper Mine Company of Wilmington, and during 1944 seven tons of ore were shipped. 10-11 References: Broadhurst, 1955, p. 17; 12 Conley, 1958, p. 20; 13 Murdock, 1950, p. 9. 867 - 100

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Beard mine
1
     Type: Gold
2
     Location: Guilford County, 1 mile south of Jamestown,
3
 5-
          Quartz veins carrying gold, chalcopyrite, and pyrite in syenitic
6
     granite. Gold mining was abandoned when sulfides were encountered at
7
     water level. Three caved shafts were seen in 1934.
8
9
     References: C. B. Brown, 1934, written communication;
 10-
                  Emmons, 1856, p. 174;
11
                  Mining Magazine, 1861, 2d ser., v. 2, p. 29;
12
                  Nitze and Hanna, 1896, p. 116;
13
                  Pardee and Park, 1948, p. 62.
14
     Beason mine
 1
     Type: Gold
 2
     Location: Guilford County, near Jamestown.
          Quartz veins in syenitic granite carried gold, chalcopyrite,
 5-
     and pyrite. The mine was worked for gold, but was abandoned when
 6
     sulfides were found at water level.
 7
 8
     References: Emmons, 1856, p. 174;
 9
                  Mining Magazine, 1861, 2d ser., v. 2, p. 28;
 10-
                   Nitze and Hanna, 1896, p. 116;
11
                   Pardee and Park, 1948, p. 62.
12
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Beattie or Sam Beattie mine
 1
      Type: Gold
2
      Location: Gaston County, 13 miles west of Charlotte and 3 miles
3
           south of Mount Holly, just to the south of the Smith mine.
 5-
      References: Genth and Kerr, 1881, p. 103;
6
                   Kerr and Hanna, 1888, p. 304;
7
                   Pardee and Park, 1948, p. 62.
 1
       Beaver mine
 2
       Type: Gold
       Location: Meckenburg County, \frac{1}{2} mile east of Mungo's store, 10-12
            miles southeast of Charlotte.
  5-
            One of a group of northeast-southwest trending quartz veins
7
       carrying gold.
       References: Nitze and Hanna, 1896, p. 144;
                     Pardee and Park, 1948, p. 63.
 10-
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Beaver Dam Mine 1 2 Gold Type: 3 Montgomery County, at Flaggtown Post Office, 2 miles Location: north to northeast of the junction of Beaver Dam 5-Creek and Yadkin River. The country rock is decomposed silicified schist cut by numerous seams of quartz. Overlying the schist is a bed of gravel 2 to 4 feet thick which is in turn overlain by 5 to 15 feet of alluvium. Placer Mining 10-11 was attempted, but was hindered by the presence of a tenacious clay saprolite which has a tendency to "ball" 12 and carry off the gold. Large and extensive bodies of 13 greenstone on the property contain pyrite and a little 14 gold and silver which assayed at \$2.37 per ton. 15-16 Bryson, 1936, p. 75; References: 17 Emmons, 1856, p. 140-141; 18 Kerr and Hanna, 1888, p. 252-253; Nitze and Hanna, 1896, p. 78-79; 20-Pardee and Park, 1948, p. 63. 21 22 23 24 25

Beaverdam Bald prospect 1 Type: Copper 2 Location: Cherokee County, 1,000 feet northeast of the foresters' station on Beaverdam Bald, in Cherokee National Forest 5--Thin seams and disseminations of iron sulfides occur 6 in black slates. Gossan was exposed at the surface. 7 No copper minerals were seen at the time of examination 8 by the U. S. Geological Survey and the Tennessee Valley Authority in 1943. 10-Reference: G. H. Espenshade, 1943, written communication. 11 12 Beck's, David, mine Type: Gold 2 Location: Davidson County, 5 miles west of Silver Hill. 3 Tetradymite and montanite associated with gold in quarta were 5noted in the ore. 6 7 References: Genth and Kerr, 1881, p. 17, 101; 8 Pardee and Park, 1948, p. 62. 9 23 24

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# Beech Mountain mine 1 Type: Lead, silver 2 Location: Watanga County, along Buckeye Creek on the north slope of 3 Beech Mountain. 5-Silver-bearing galena is found with pyrite and quartz in small 6 gash veins in greenish schist derived from a metamorphosed diabase 7 dike cutting granitic rocks. A small amount of ore was produced in the 8 early 1900's. 10-Reference: Keith, 1903, p. 8. 11 Bee Mountain mine Type: Gold 2 Location: Caldwell County, 4 miles N. 80° W. from Lenglor on the 3 northwast slope of Bee Mountain, and 4 miles northwast of the . Batker mine 5~ 6 Quartz veins carrying brown-stained fellular quartz, gold, sphalerite, 7 glena, and chalcopyrite are in garnetiferous mica gneiss and pegmatite 8 country rock. Two shallow prospect shafts and a tunnel were seen in 1896. One shaft was 70 feet deep and filled with water, the other was 30 feet deep. 11 12 References: Bryson, 1936, p. 138; 13 Nitze and Hanna, 1896, p. 178; 14 Nitze and Wilkens, 1897, p. 68; 15-

Pardee and Park, 1948, p. 62.

Bell (Belle) mine 1 Type: Gold 2 Location: Moore County, 7 miles east of Carter; 8 miles north-northwest of Carthage; ½ mile west of Putnam. This is one of the better known of a group of 9 or 10 mines in a northeast-southwest trending 5 -belt 6 miles long, and 2 miles wide. The ore body is a 4-foot wide zone containing, finely disseminated pyrite, intercalations of siliceons seams from 1/8 to 4 inches thick, and small calcite seams garnetiferous chlorite schist. 10in seric tioned felsic tuff altered near the ore body to the ore 11 carried very little sulfide and the free gold was very "leafy", 12 which caused great difficulty in working the ores by ordinary means 13 of amalgamation. The ore averaged \$12.00 per ton in gold and \$.45 14 per ton in silver. The Bell mine was worked to a depth of 110 feet, 15and for a length of 800 feet by 4 shafts and numerous open cuts. It 16 was abandoned in 1894. 17 18 References: Bryson, 1936, p. 67; 19 Conley, 1962a, p. 26; 20-Kerr and Hanna, 1888, p. 242-243; 21 Nitze and Hanna, 1896, p. 54-55; 22 Nitze and Wilkens, 1897, p. 56; Pardee and Park, 1948, p. 64. 24 25

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1
      Bennett mine
      Type: Gold
 2
      Location: Mecklenburg County, west to northwest of Charlotte,
  5-
      References: Nitze and Hanna, 1896, p. 132;
 6
                   Pardee and Park, 1948, p. 63.
 7
     Berry mine
     See Eddleman mine, Gaston County.
 2
     Berry, E. A., prospect
1
     Type: Tin
· 2
     Location: Gaston County, about 3/4 mile west of the Ormond prospects.
3
           Caniterite occurs in greista in muscovite and hornblende schist
 5-
     and gneiss.
7
     Reference: Kesler, 1942, table 18.
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A.G. Betts mine

Type: Barite

Location: Madison County, extending northward from the French Brad River for  $\frac{1}{2}$  mile.

The barite vein in Max Patch Granite was tested by shafts, tunnels and trenches. Impurities include fluorite, pyrite, and galena.

Reference: Hunter and Gildersleeve, 1946, p. 9-10.

Betts Gap mine

see Savannah mine, Jackson County

Big America (Royster) mine

Type: Copper

Location: Granville County, ½ mile east of Blue Wing

The ore is largely bornite in quartz veins in siliceous and chloritic schists. Pyrite and chalcopyrite are present in the merest specks in the ore. Two shafts, one 40 and the other 80 feet deep, were put down by the Big American Reduction Company in the 1880's. The shafts are but a few feet apart and are connected by a stope in the vein.

Reference: Kerr and Hanna, 1888, p. 216-217.

```
1
     Biggers mine
     See Nugget mine, Cabarrus County.
2
3
     Biggerstaff mine
1
     Type: Gold
     Location: Rutherford County, near Golden.
3
          Gold was produced from placers in 1912 and 1913. In 1916-1917
 5-
     the mine was owned by W. E. Sudlow and was one of the largest
7
     producers of placer gold in those years.
8
     References: Pardee and Park, 1948, p. 64;
 10-
                  Pratt and Berry, 1919, p. 25-26;
11
                  U. S. Geol. Survey Min. Res. U. S., 1912, p. 430.
 15-
     Biles mine
1
     <u>see also</u>: Freehold mure, Stanly County
2
     Location: Stanly County, near Salisbury,
3
            This was a placer mine. In 1887 it was operated with the
 5 -
     Parker, Johnny Parker, and Flint Springs mines as the Freehold Fold
     Mine*, by the Stanly Freehold Gold Mines, Ltd.
7
     Reference: Eng. and Mining Jour., 1887, v. 43, p. 444.
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Black mine
1
    Type: Gold
2
    Location: Davidson County, adjacent to the Eureka mine. -
         Quartz stringers occur in highly schistose rock.
 5-
6
     References: C. B. Brown, 1934, written communication;
7
                 Nitze and Hanna, 1896, p. 117.
 1
       Black (Z. V. Teeter) mine
       Type: Gold
       Location: Mecklenburg County, 8 to 10 miles east of Charlotte,
 3
            0.3 mile south and 0.2 mile northeast of Hickory Grove.
  5-
            A small but rich vein of oxidized brown ore was mined many
       years ago. Many shallow pits and trenches were seen in 1934.
 7
 8
       References: Kerr and Hanna, 1888, p. 302;
 9
 10-
                     J.V. Lewis, 1934, written communication;
11
                     Nitze and Hanna, 1896, p. 144;
12
                     Pardee and Park, 1948, p. 63.
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Black mine
 1
 2
       Type: Gold
       Location: Union County, \frac{1}{2} mile east of Indian Trail.
 3
            Two quartz veins carrying gold and silver with pyrite, galena,
  5-
       chalcopyrite, sphalerite, and bornite occur in slate country rock.
 6
       In 1896 the workings consisted of a 60-foot shaft with drifts.
 7
       1904 the shaft was 175 feet deep and there was a 10-stamp mill on the
       property. A production of $8,000 in gold was estimated for 1904.
       The mine was closed in 1906.
 10-
11
       References: Bryson, 1936, p. 94;
12
                     Nitze and Hanna, 1896, p. 99;
٠13
                     Pardee and Park, 1948, p. 103;
14
  15-
                     Pratt, 1907, p. 61.
16
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U. S. GOVERNMEN" "

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Black Ankle mine 1 Type: Gold 2 Location: Montgomery County, 11-14 miles northeast of Troy. -3 Finely divided gold and pyrite in cakes are associated with 5quartz stringers in a miner alized zone in sericite schist derived from volcanic tuff. Saprolite, clay like decomposed tuff, covers the 7 The deposit was discovered in 1928 and was operated intermittently until 1935 by Edward Hedrick, who reported a production of \$15,000 or about 750 ounces of gold. The workings consist of a 10pit 225 feet long, 120 feet wide in saprolite and 50 feet deep, and 11 a 112-foot shaft. The ore is of low grade though its gold content is 12 not accurately known. Considerable gold has been lost owing to its 13 extremely fine subdivision and the nature of the slime produced by 14 the saprolite when washed. Several gold recovery processes were 15attempted but none proved successful. 16 17 References: Bryson, 1930, p. 14-15; 18 Bryson, 1936, p. 75-77; 19 Bryson, 1937, p. 24; 20-Pardee and Park, 1948, p. 80-81. 21 22 23

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1
      Black Cat mine
      Type: Gold
2
      Location: Mecklenburg County, 12 miles east of Charlotte.
3
      Reference: Pardee and Park, 1948, p. 63.
 5-
     Blackwelder mine
 1
     Type: Gold
2
     Location: Cabarrus County,
3
              WAN
          Gold reported in the ore.
 5-
     Reference: Genth and Kerr, 1881, p. 96.
.3
      Blair mine
1
      See Ellington mine, Mecklenburg County.
2
17
    Blake mine
    Type: Gold
    Location: Mecklenburg County, near Charlotte;
3
         Gold and pyrite were noted.
   References: Genth and Kerr, 1881, p. 111;
7
                 Nitze and Hanna, 1896, p. 125;
                 Pardee and Park, 1948, p. 63.
```

Blue Ridge Tin Corporation main works 1 Type: Tin 2 Location: Cleveland County, about  $\frac{1}{2}$  mile southwest of the Ledoux prospects, and 3,300 feet south of Park Yarn mill. 5-Cassiterite occurs in greisen and feldspathic gangue in 6 spodumene-bearing pegmatite dikes in muscovite schist and gneiss 7 and hornblende gneiss. Five ore bodies are exposed, the largest of which was 4 feet thick and had a strike length of 250 feet. The Blue Ridge Tin Corporation prospected the mine about 1897. At the north-10east end of the property a shaft 80 feet deep (No. 4) was sunk, with 11 60 feet of drifts. About 200 yards southwest is shaft No. 5, 130 12 feet deep. Placer deposits were worked in the valley southwest and . 13 south of the mine, for a length of over 200 yeards. 14 15-References: Keith and Sterrett, 1917, p. 141-142. 16 Kesler, 1942, table 18; plate 39. 17 18 Blue Ridge mine 1 --- see Nibelong mine, Caldwell County 2 22 23 24 25

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Blue Wing mine

Type: Copper

Location: Granville County, 1 1/4 miles south of Virgilina. -

A quartz fissure vein in andesitic tuff of the Virgilina Greenstone carries bornite, chalcocite, malachite, azurite, and argentite(?) in a gangue of quartz, calcite, chlorite, epidote, and hematite. Both the footwall and the hanging wall are well defined, and the ore is confined to the vein, which has been traced on the surface for nearly half a mile. The vein is opened in 3 places, at the Blue Wing mine proper, 1,000 feet south at the Spring shaft, and 1/4 mile south of the Spring shaft at a pit 24 or 30 feet deep. The mine was just first operated about 1886. In 1895 it was owned by the Boston and Carolina Copper Company. It was last operated in 1909 by the Tennessee Copper In 1910 the workings consisted of one shaft 360 feet deep, 3 prospect shafts, and 1,700 feet of drifts. In 1942 the mine was owned by The Virginia Rock and Minerals Company. In 1942 and 1943 the U.S. Bureau of Mines investigated the mine by trenching, diamond. drilling, and geophysical survey. The production of this mine is estimated at more than 50,000 tons of 4 percent copper ore.

References: Laney, 1917, p. 102-114; Newberry & others, 1948, p. 11-12; Studies, 1965, p. 288-289; Weed, 1911, p. 84-87, 1900, p. 464-467;

24

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Dan Boger mine
    Type: Gold
2
    Location: Cabarrus County, 4 miles west of Georgeville. ---
         Pre-Civil War pits were seen in granite country rock.
 5--
    References: C. B. Brown, 1934, written communication;
7
                 Pardee and Park, 1948, p. 62.
    Bolton prospect
1
    Type: Gold
2
    Location: Guilford County, 2 miles east of High Point.
         Quartz vein in slate carries gold.
 5-
    References: C. B. Brown, 1934, written communication;
7
                  Pardee and Park, 1948, p. 62.
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U. S. GOVERNING

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Bonnie Belle (Washington) mine 1 Type: Gold 2 Location: Union County,  $1\frac{1}{2}$  miles northwest of Mineral Springs and 3 1 mile east of the Howie mine; 8 miles west of Monroe. Penman mine is given this same location. 5--A silicified zone in argillaceous schist contains finely divided 7 sulfides, chiefly pyrite and chalcopyrite, and small specks of free 8 gold on the principal cleavage planes. The ore zone averages 14 feet in width and extends for a distance of about 1/4 mile along the strike. 10-In 1894 a 20-foot shaft exposed an ore body 5 to 8 feet wide, the 11 richest part of which was a 2-foot layer next to the hanging wall. 12 The ore was being treated in a combination Chilean and drag mill with . 13 plates and a concentrating table. A sample of the mill heads assayed 14 0.206 ounce of gold per ton and 1.42 ounces of silver per ton. Twenty 15~ shafts and pits, inaccessible in 1934, are distributed along a north-16 east-southwest course for a distance of 1,200 feet. 17 18 Bryson, 1936, p. 97-99; References: 19 Kerr and Hanna, 1888, p. 262; 20-Nitze and Hanna, 1896, p. 104; 21 Nitze and Wilkens, 1897, p. 63; 22 Pardee and Park, 1948, p. 103. 23 Bonnie Doon mine 1

See Smart mine, Union County.

U. S. GOVERNOUS

Bonnie Mill prospect 1 Type: Tin 2 Location: Cleveland County, 0.15 mile southeast of Bonnie Mill, about  $\frac{1}{2}$  mile south of the town of Kings Mountain. 5-Cassiterite float was seen. Reference: Kesler, 1942, table 18. 8 Boson mine 1 Type: Gold 2 Location: Randolph County, 3 Reference: Pardee and Park, 1948, p. 64. 15-Boss mine 1 Type: Gold 2 about 5 miles west of Silver Hill. \_ Location: Davidson County, 3 Coarse-grained galena was noted in the ore. Emmons reported 5-that handsome cabinet specimens of galena associated with chalcoyprite 6 were taken from a 4 to 6 foot quartz vein. 7 References: Emmons, 1856, p. 208-209; Genth and Kerr, 1881, p. 101. 10-

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Charlie Bost mine
1
      Type: Gold
2
     Location: Cabarrus County, 6 miles southeast of Concord. —
3
     Reference: Pardee and Park, 1948, p. 62.
 5--
6
    Boswell, Ruben, prospect
1
    See Strothers prospect, Union County.
2
10-
11
12
      Boyd mine
      Type: Gold
2
      Location: Alamance County.
3
            was found
          Gold in placers.
 5--
6
     Reference: Geyth and Kerr, 1881, p. 91.
 20-
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U. S. GOVERNINE

Boylston (Boilston) mine 1 Type: Gold Location: Henderson County, on the southeastern slope of Forge Mountain, along Boylston Creek, 22 miles south of Asheville and 12 miles west of Hendersonville. Four rusty, cellular quartz veins from 1 to  $4\frac{1}{2}$  feet thick carrying free gold in the copper levels and gold, pyrite, and galena 9 below water level occur in fine grained mica and hornblende schists 10of the Ocoee Formation. The Boylston Mining Company was organized 11 in 1886 and operated the mine and a 10-stamp mill sporadically for 12 several years. The No. 2 vein was the best developed of the veins . 13 and produced more than 1,000 tons of ore reported to carry \$4.00/ton 14 in gold. Openings have been made on this vein over a length of 1,500 feet. Several attempts were made during the 1930's to reopen 16 the mine. 17 18 References: Bryson, 1936, p. 146-147; Keer and Hanna, 1888, p. 316-317; 19 20-Nitze and Hanna, 1896, p. 181-191. 21 22 23 24

1 Brackettown mine 2 see Marion Bullion Company mine, McDowell County 3 Brafford mine 1 Type: Gold Location: Mecklenburg County, east of Mungo's store, 10-12 miles 3 southeast of Charlotte, 5-One of a group of northeast-southwest trending gold-bearing quartz veins. References: Nitze and Hanna, 1896, p. 144; Pardee and Park, 1948, p. 63. 10-15--Branson mine 1 Type: Gold 2 Location: Randolph County, 6 miles south of Asheboro. 3 Quartz stringers carrying gold fill sheared zones in andesitic 5tuff. In 1934 the remnants of 4 shafts were seen. About 1/2 acre of the surface had been stripped to a depth of 5 feet. References: C. B. Brown, 1934, written communication; 9 Pardee and Park, 1948, p. 64.

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1
      Brawley mine
      Type: Gold
2
      Location: Mecklenburg County, 4 miles west of Charlotte or 5 to
3
           10 miles northwest of Charlotte,
 5--
           Rich float quartz on the surface had been very productive of
6
      gold before 1887. The surface appeared to be a network of quartz
7
      seams for no vein was found.
8
      References: Genth and Kerr, 1881, p. 111;
 10-
                   Kerr and Hanna, 1888, p. 293;
11
                   Nitze and Hanna, 1896, p. 132;
12
                   Pardee and Park, 1948, p. 63.
εľ
14
      Brendle Knob mine
 2
      Type: Copper
      Location: Jackson County.
  5-
           The mine belonged to the Carolina Copper Company in 1911.
 6
7
     Reference: Weed, 1911, p. 136.
23
24
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U. S. GOVERNINGS "

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Briggs mine
1
      Type: Gold
2
      Location: Davidson County, 2 1/2 miles north of Silver Hill. -
3
          Quartz stringers up to 18 inches thick occur in highly sheared
 5-
      and weathered granite. Two shafts were sunk of 45 and 20 foot depths.
6
      The surface has been poured for an acre around the shafts.
7
8
      Reference: Ø. B. Brown, 1934, written communication;
                  Pardee and Park, 1948, p. 62.
10-
     Briggs mine
1
     See Kings Mountain mine, Gaston County.
2
     Bright mine
1
      Type: Gold
2
     Location: Montgomery County, along the west flank of the Uharie
3
          Mountains.
 5 -
           This was a placer mine in gravel underlying saprolite, which
     hindered the concentration of the gold.
7
8
     References: Bryson, 1936, p. 78;
                   Kerr and Hanna, 1888, p. 248;
 10-
                   Nitze and Hanna, 1896, p. 80;
11
                   Nitze and Wilkens, 1897, p. 52;
12
                   Pardee and Park, 1948, p. 63.
```

```
Bright Light mine
1
    See Crowell mine, Union County.
2
3
     Bringle mine
 1
      Type: Gold
 2
      Location: Rowan County
 3
      Reference: Genth and Kerr, 1881, p. 116.
10-
     Brinkley (Allison) prospect
     Type: Copper
     Location: Jackson County, on the north side of the Tuckasegee River
          about 1\frac{1}{2} miles from the Woods farm.
 5-
          Very similar to Woods Farm prospect, no sulfides were seen, but
     biotite gneiss cut by stringers of epidote and quartz is exposed in
     three shallow pits. The prospect was
       Worked prior to the Civil War.
9
     References: G. H. Espenshade, 1944, written communication;
11
                  Hunter and Gildersleeve, 1946, p. 18.
23
24
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U. S. GOVERNING T

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Brown mine
1
      Type: Gold
2
     Location: Davidson County, 1 mile north of Cid. -
3
     Four prospects were discovered in bluish gray varved slate.
 5 -
6
     Reference: C. B. Brown, 1934, written communication.
7
8
 1
       Brown mine
 2
       Type: Gold
       Location: Mecklenburg County,
  5 –
            Gold was noted in the ore.
 6
       Reference: Genth and Kerr, 1881, p. 111.
 7
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```
Brown mine
 1
     Type: Gold
 2
     Location: Moore County, about 789 feet southwest of the Burns mine,
      in a sharp meander of Cabin Creek, on the road from Moffitt's to
     Richardson's mill.
 5 —
6
           Gold is disseminated through silicified pericitized felsic
     tuff county rock. The dip of the ore body is very flat; the ore body
8
      is 3 feet thick, but the "pay seam" was a narrow seam of rich quartz.
      The mine was worked as an open cut 350 yards long. A few shallow
 10-
      shafts or prospect pits were dug. The mine was last operated in 1905.
11
12
     References: Bryson, 1936, p. 68;
                   Conley, 1962 a, p. 25;
14
                   Kerr and Hanna, 1888, p. 244;
 15-
                   Nitze and Hanna, 1896, p. 56;
16
                   Nitze and Wilkens, 1897, p. 57;
17
                   Pardee and Park, 1948, p. 64.
18
       Brown prospect
          See Pardo mine, Henderson County (
22
23
      Brown Hill mine
 1
            See Delft mine, Randolph County
```

```
Brown Hill mine
1
     Type: Gold
2
     Location: Union County, 1 mile west of Stout and 3\frac{1}{2} miles south of
3
          Indian Trail.
 5-
          A large quartz vein consisting of a series of connected lenses
6
     crops out along a low ridge varies from 3 to 20 feet in width.
7
     Sulfide grains and rusty spots are distributed through the quartz.
8
     Reference: Pardee and Park, 1948, p. 103.
 10-
11
. 1
     Brown Mountain mine
2
     Type: Gold
3
     Location: Burke County, 13 miles north of Morganton on Caney Branch,
          a tributary of Upper Creek.
 5-
          Quartz lenses and stringers interbedded with choritic schists in
6
7
     coarse grained granite assayed only a trace of gold and one ounce of
8
     silver. Sulfides occurred sparingly.
          In 1896 there were two shafts, 20 and 25 feet deep, and one small
     open cut.
 10-
11
     References Bryson, 1936, p. 137;
12
                 Nitze and Hanna, 1896, p. 175;
13
14
                 Pardee and Park, 1948, p. 62.
```

```
Bryan's Gap (Trap Hill) mine
 1
 2
     Type: Copper, gold
     Location: Wilkes County, on the eastern face of the Blue Ridge at
 3
          Bryan's Gap, 3 miles north of Trap Hill.
  5-
 6
          A quartz outcrop was traced for nearly 4 miles, Pyrrhotite, pyrite
 7
     and chalcopyrite, occasionally in large masses, were seen in the quartz
 8
     vein, which ranged from 3 to 20 feet in width and dipped easterly with
     the enclosing schists. The ore was good-and silver-bearing.
  10~
 11
     References: Conley, 1958, p. 75;
 12
                  Kerr and Hanna, 1888, p. 231;
, 13
                  Nitze and Hanna, 1896, p. 179.
       Bryant Park mine property
 1
       See Griffith mine, Mecklenburg County.
 2
 17
 1
      Buck Creek prospect
 2
      Type: Copper
 3
      Location: Macon County, 8 miles southeast of Franklin on Buck Creek.
 4
           Pyrrhotite and chalcopyrite occur in a quartz vein in quartz
  5 --
      mica gneiss. Two open cuts and a 15-foot shaft. A small amount of
      ore was shipped from
      Reference: Tennessee Valley Authority, 1942, written communication.
```

```
Buckeye mine
 1
      Type: Copper
2
      Location: Person County, several hundred yards west of the Poole
3
            mine, and one mile north of the Gillis mine. -
 5-
            A quartz vein with dopper staining was seen. It pinched out at
      depth.
7
8
      Reference: Kerr and Hanna, 1888, p. 218.
 10-
      Buck Knob prospect
 1
      Type: Copper
 2
      Location: Jackson County,
                                                          in the same belt
 3
           of copper localities with Shell Ridge, Wayehutta, and Hornbuckle.
 15-
     References: Smith, 1875, p. 113;
16
                   Weed, 1911, p. 137.
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## Buck Mountain mine

Type: Gold

Location: Montgomery County, 7 miles west of Troy and 1/4 mile from the Uharie River on the side of Buck or Gold Mountain.

Two quartz veins carrying free gold, 25 to 50 feet wide, were well exposed in the side of the mountain. Below the outcrop of the vein fragments of gold-bearing quartz were found. Rough gold was panned from the surface mantle over an area of 50 acres below the outcrops of the veins.

References: Pardee and Park, 1948, p. 85.

### Buffalo mine

Type: Gold

Location: Cabarrus County, ½ milewest of Georgeville and one mile northeast of the Rocky River mine.

A mineralized zone 25 feet wide that contains quartz veins with pyrite, galena, sphalerite, and chalcopyrite, and assays 0.17 ounce of gold per ton is found in schist of the volcanic series.

References: Nitze and Hanna, 1896, p. 93;
Nitze and Wilkens, 1897, p. 61;
Pardee and Park, 1948, p. 71.

63

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Bullion Mine 1 2 Gold Type: 3 Rowan County,  $\frac{1}{2}$  mile east of the Reimer Mine, and Location: 24 miles southeast of Granite Quarry. 5-A prominent quartz vein, probably the continuation of the Reimer vein, contains limonite and pyrite in granite country rock. Overgrown workings extending for 500 feet along the vein were seen in 1934. The vein 10was never much worked; the last work was done in 1881. 11 The ore assayed from \$6.20 to \$15.51 gold per ton. 12 References: C. B. Brown, 1934, written communication; 13 Kerr and Hanna, 1887, p. 282; 14 Nitze and Hanna, 1896, p. 120; 15-Pardee and Park, 1948, p. 91. 16 17 18 19 20-21 22 23 25

```
Bunnell Mountain mine
1
      Type: Gold
2
     Location: Montgomery County, on the west flank of the Uharie
3
           Mountains.
 5 --
           This was a placer mine in gravel underlying saprolite. Mining
6
     was hindered by the scarcity to water and the tenacious nature of
7
      the saprolite.
8
      References: Bryson, 1930, p. 78;
 10-
                   Kerr and Hanna, 1888, p. 248;
11
                   Nitze and Hanna, 1896, p. 80;
12
                   Nitze and Wilkens, 1897, p. 52;
13
                   Pardee and Park, 1948, p. 63.
14
 15-
      Burnett mine
      Type: Gold
 2
      Location: Mecklenburg County,
      Reference: Genth and Kerr, 1881, p. 111.
 5 --
22
23
24
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1
      References:
                    Bryson, 1936, p. 67-68;
                    Conley, 1962 a, p. 25;
 3
                    Kerr and Hanna, 1888, p. 245-246;
                    Nitze and Hanna, 1896, p. 55-56;
  5--
                    Nitze and Wilkens, 1897, p
                    Pardee and Park, 1948, p. 64.
 7
       Burns mine
 1
       See Allred mine, Randolph County
 2
..11
       Burrell Wells (V. W. Smith) mine
 1
       Type: Gold
       Location: Gaston County, 2 miles southwest of Mount Holly and 3\frac{1}{2}
            miles southeast of the Duffie mine; also 2 miles south of the
            Tuckasegee Ford on the Katawba River.
            Gold with pyrite and chalcopyrite occurs in quartz veins.
 7
       Six parallel veins had been prospected by 1896; the deepest workings
 8
       were less than 50 feet deep.
  10-
       References: Genth and Kerr, 1881, p. 103;
 11
                     Kerr and Hanna, 1888, p. 221, 304;
 12
                     Nitze and Hanna, 1896, p. 149;
13
                     Pardee and Park, 1948, p. 62.
 14
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10-

Burns (Alred, Burns and Alred) mine

Type: Gold

Location: Moore County, 11 miles west-northwest of Carthage, on Cabin Creek, and 2 miles southwest of Hemp. It is 1050 feet southwest of the Allen mine. This is one of a group of mines in the northwestern part of Moore County and may be connected with the most eastern of the Montgomery County belts.

The country rock is chloritic schist, in places talcose, and in places pyrophyllitic and hydro-micaceons. The schist is filled with quartz stringers and lenticles and is everywhere auriferons, although not everywhere capable of being profitably worked. Iron sulfides also occur in the schist. The ore was said to yield \$2.50 to \$3 per ton in gold. Large open cuts 20 to 100 feet wide and 50 feet deep extend along the strike for a distance of about 1/5 mile on Moody Hill near the east boundary of the mine property. Some work was also done on Brown Hill near the western end of the property. The mine was opened in the 1830's and was operated for more than 50 years. In 1894 the ores were being treated in five Crawford mills by the Columbia Mining Company, but the operations apparently did not prove successful. In 1895 the Cabin Creek Mining Company built a 10-stamp mill and planned to introduce the cyanide process. The mine was operated briefly in 1906 and in 1915 and 1916.

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1
     Burton mine
2
     Type: Gold
3
     Location: Lincoln County, near Lincolnton.
 5-
          The mine was worked extensively, probably in the middle 1880's.
     Reference: Nitze and Hanna, 1896, p. 150.
7
8
     Butler (County Line) mine
     Type: Gold
     Location: Davie County, 8 miles southwest of Mocksville.
 3
          A large, low grade body carrying gold in gneissic rocks was worked
  5-
     before 1888.
     References: Kerr and Hanna, 1888, p. 307;
 8
                  Nitze and Hanna, 1896, p. 151.
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#### Butterfield mine

Type: Gold

Location: Union County,  $4\frac{1}{2}$  miles east of Indian Trail; 150 yards northwest of the Crump mine and on a northward extension of the mineralized belt developed at the Crump mine.

The country rock is dark bluish-gray slate impregnated with pyrite in cubes. Quartz carries gold-bearing pyrite and chalcopyrite. The mine was last worked in 1886, When there were 2 shafts, 30 and 50 feet deep.

References: Brown, C. B., 1934, written communication;
Nitze and Hanna, 1896, p. 98;
Pardee and Park, 1948, p. 103.

#### Cabarrus mine

Type: Copper, gold

Location: Cabarrus County,

A quartz vein 7-8 inches wide carried chalcopyrite, pyrite, and gold. The mine was operated by the American Mining Company in 1853. A series of pits was dug along the vein.

Reference: Mining Mag., 1854, p. 317.

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1
      Cabe mine
      see Otto mine, Macon County
 3
       Cady mine
 1
       Type: Gold
 2
       Location: Rowan County,
 3
       Reference: Genth and Kerr, 1881, p. 116.
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## Cagle (Laurel Hill, Hancock, Talc) mine

Type: Gold

Location: Moore County, 3/4 mile north of the Burns mine and 1500 feet southeast of the Clegg mine, on the east side of Cabin Creek, 1½ miles southwest of Hemp.

Pyrite and traces of chalcopyrite with gold are disseminated through networks of quartz veinlets in siliceous and talcose schist country rock. The ore assayed from \$4.00 to \$7.54 per ton in gold and \$0.13 to \$1.10 per ton in silver. The mine was operated at least as early as 1865 and in 1888 there were two inclined shafts, with depths of 171 and 180 feet. Unlike most of the mines of the area, the work here and a 20-stamp mill was mostly underground. In 1906 an attempt was made to dewater old workings. Open cuts extend for 300 feet along the strike. As many as 30-stamps were in operation here at one time.

References: Bryson, 1936, p. 68;

Conley, 1962 a, p. 25;

Kerr and Hanna, 1888, p. 245;

Nitze and Hanna, 1896, p. 56;

Nitze and Wilkens, 1897, p. 57;

Pardee and Park, 1948, p. 64.

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14

Reference:

Caldwell (Craig-Davidson) mine 1 2 Type: Gold Location: Mecklenburg County, 3 miles northeast of Charlotte. 3 4 Gold and pyrite were noted in the ore. 5-6 References: Genth and Kerr, 1881, p. 111; 7 Nitze and Hanna, 1896, p. 143; 8 9 Pardee and Park, 1948, p. 63. 1 Caledonia mine See Crowder's Mountain mine, Gaston County. 2 13 Calhoun Frospect 1 2 Copper Type: 3 Swain County, on the east side of Bone Valley, about Location: 1 miles up the valley from Hazel Creek -5--6 Disseminations and stringers of chalcopyrite were 7 found in a 3 to 4 foot wide zone of mica schist and sheared siltstone. The chalcopyrite-rich rock assayed 9 2.66 percent copper and 0.47 percent zinc. The 10mineralized zone was opened for 20 feet along its 11 strike in 1943; but trenching failed to reveal a con-12 tinuation of the mineralization.

Espenshade, 1963, p. 35-36.

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California mine
 1
      See Tucker mine, Cabarrus County. —
2
3
     California mine
1
     Type: Gold
2
     Location: Moore County, in the extreme southwest end of the Standard
3
           Mineral Company's pyrophyllite pit, 2\frac{1}{4} miles southwest of
           Robbins.
 5-
6
           A shaft was sunk here to a depth of 75 feet by Peter Shamburger
     in about 1896. The ore was of low grade and the mine soon closed.
     Reference: onley, 1962a, p. 25-26.
 10--
 15--
16
     Callahan Mountain mine
 1
     Type: Gold
2
     Location: Davie County,
3
     References: Kerr and Hanna, 1888, p. 307;
 5-
                  Nitze and Hanna, 1896, p. 151.
6
24
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U. S. GOVERNINE.

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Cambridge mine
1
     Type: Copper
2
     Location: Guilford County,
           Quartz veins carried pyrite, chalcopyrite, chalcocite,
 5-
     barnhardtite, chrysocolla, and malachite. The mine was worked in
     1861 and had a 150-foot shaft.
7
8
     References: Genth and Kerr, 1881, p. 104;
9
                 Mining Magazine, 1861, [ser. 2], v. 2, no. 1, p. 113-114.
 10-
11
      Cambuco mine
 1
      Type: Copper
      Location: Jackson County, on the Cullowhee vein,
3
      Reference: Weed, 1911, p. 137.
  5 --
17
      Cameron placer mine
 1
      Type: Gold
2
      Location: Moore County, 5 miles northwest of Carter.
3
          This was a placer mine.
      Reference: Pardee and Park, 1948, p. 64.
23
24
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Cameron Mountain Mine 1 2 Gold Type: 3 Randolph County, adjoins the southern Homestake Mine, Location: near Lytton, Tabernacle Township. — 5-The ore is in a silicified zone in sheared 7 schistose tuff. The mine was opened to a depth of 125 feet in 1904. Most of the ore probably was taken from a group of pits up the hill from the main shaft. 10-The last recorded work was a placer operation in 1923. 11 References: C. B. Brown, 1934, written communication; 12 Pardee and Park, 1948, p. 64; 13 Pratt, 1904, p. 13. 14 Campbell mine 2 Type: Gold Location: Mecklenburg County, 5-10 miles northwest of Charlotte. 3 5-Reference: Pardee and Park, 1948, p. 63. 20-21 Camp Ridge mine Type: Gold 2 Location: Rowan County, 4 miles east of Rockwell. 3 Reference: Pardee and Park, 1948, p. 64.

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1
     Cane Creek placers
2
     Type: Gold
3
     Location: McDowell County and Rutherford County, placers along
           Cove Creek.
16
     Reference: Nitz and Hanna, 1896, p. 152 (map);
17
                  Conley, 1958, p. 65.
18
      Cannon mine
       Type: Gold
      Location: Gaston County,
3
      Reference: Genth and Kerr, 1881, p. 103.
14
 15-
17
      Cansler and Shuford mine
 1
      Type: Gold
 2
                             or Lincoln County,
      Location: Gaston County
      References: Genth and Kerr, 1881, p. 103;
  5 —
                  Wurtz, 1859, p. 25.
6
24
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Cany Fork Bald prospect 1 Type: Copper 2 Location: Jackson County, on a ridge about 1 mile southwest of Cany Fork Bald. 5-Quartz veins carrying limonite cratings in quartz - mica schist 6 country rock. No sulfide minerals were seen. There were two shallow 7 prospect pits. Reference: G. H. Espenshade, 1944, written communication. 10-11 12 · 13 14 15-16 17 18 19 20-21 22 23 24 25

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Capps (Capps Hill) mine

Type: Gold

Location: Mecklenburg County, 5 to  $5\frac{1}{2}$  miles northwest of Charlotte, between the Rozzel's Ferry and Beattie's Ford roads, adjoining the McGinn mine on the south.

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The mine is located on two of a group of nearby convergent veins in the granite belt, the Capps vein and the Jane vein. Near the surface were brown oxidized ores which extended to a depth of 130 feet; below this depth were pyrite and chalcopyrite. The mine was operated as early as 1826 and continued to operate for several years, during which it had a large production. The mine was idle from 1840 until 1882, when it was reopened and worked for several years by Capt. John Wilkes. The production for this period was about 6,000 tons of ore which yielded \$60,000 in gold. In 1934 the mine was taken over and developed by Hugh Jardine of Toronto, Canada. Numerous closely spaced surface workings and shafts extend for a length of more than 2,000 feet on the main vein. The shafts are known as the Gooch, 70 feet deep, Bissell shaft, 130 feet deep, Penman shaft, 65 feet deep, and Mauny shaft. Four large ore bodies were developed through these shafts. The part of the Jane vein on the Capps property was worked through the 160-foot Isabella shaft. The total production has been estimated at over \$1,250,000.

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Bryson, 1936, p. 117-121;
     References:
1
                  Bryson, 1937, p. 16;
2
                  Kerr and Hanna, 1888, p. 294-297;
3
                  Nitze and Hanna, 1896, p. 133-137;
                  Nitze and Wilkens, 1897, p. 64-66;
 5-
                  Pardee and Park, 1948, p. 77.
7
      Carolina Queen mine
 2
      Type: Copper, gold
      Location: Burke County, on the northeast slope of White's Knob
 3
         er Hill's Knob, on Hall's Creek.
  5-
           Small parallel veins in gneiss carry saccharoidal, milky, and
      sulfide stained quartz. Below water level pyrite, galena, chalcopyrite,
      and sphalerite were reported. There was a stamp mill in 1896.
 7
 8
      References: Kerr and Hanna, 1888, p. 312; Nitze and Hanna, 1896,
 9 ~
      p. 164; Pratt, 1914, p. 18.
17
18
1
     Carpenter mine
2
     Type: Gold
3
     Location: Polk County, South Mountain area.
     Reference: Nitze and Hanna, 1896, p. 174.
24
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U. S. GOVERNMENT ...

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J.M.L.,-
    J. M. L. Carpenter-Paul Hastings prospect
1
    Type: Tin
2
    Location: Gaston County, about 1 mile southeast of the Metcalf prospect.
3
         At the Carpenter prospect cassiterite occurs in a conformable ore
 5-
    body in pegmatite in greisen gangue in muscovite schist and gneiss
    wall rock.
7
         In 1940 the 40-foot shaft of the Carpenter prospect was inaccessible.
8
    An 18-foot pit was sunk in ore on the Hastings property in 1940.
    William Carpenter prospect described by Graton is in the same area as
    the J. M. L. Carpenter prospect.
11
12
    References: Graton, 1906, p. 51;
iз
                  Kes$ler, 1942, table18.
14
 15-
                    S, T.,
     8 Carpenter prospect
 1
     Type: Tin
 2
     Location: Lincoln County, about 2 miles southeast of Lincolnton.
 3
          Cassiterite occurs in a gangue of quartz-muscovite greisen, in a
  5-
     country rock of muscovite schist and hornblende biotite gneiss.
 7
     Reference: Kesler, 1942, table 18.
 25
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Carson mine
1
      Type: Gold
2
      Location: Mecklenburg County, in the Charlotte municipal gold course
3
           near the intersection of W. Tremont Ave. and Barringer Dr., along
           the bluff facing Irwin Creek.
 5-
6
           Quartz, carbonate, and pyrite occur in a shear zone in granite.
7
      In 1934 there was an open cut 200 feet long and 15 feet deep.
9
      References: J. V. Lewis, 1934, written communication;
10-
                   Pardee and Park, 1948, p. 63.
11
12
     Carson mine
1
      See Sumner mine, Mecklenburg County. (
2
16
     Carson mine
1
           See Alta mine, Rutherford County (
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U. S. GOVERNAL TO

## Carter Mine

Type:

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Gold

Location: Montgomery County, 3 miles east of Troy; 3 miles west

of Star. The Norfolk Southern Railroad passes through

the property. \_\_\_\_

This is one of the older mines in North Carolina. The ore zone is 1 to 2 feet wide and consists of quartz stringers interlaminated with country rock which is an altered andesite schist. The schist is chloritic and sericitic and is charged with gold-bearing pyrite. Emmons reported gold telluride occurring with lime carbonate in the quartz veins. The mine was worked in the 1850's by the Mauney Brothers, who reportedly left when the vein pinched out. They produced between \$100,000 - \$200,000. This work was done for a length of 150 feet along the vein at a depth of at least 65 feet. In 1906 the mine was owned by Sam Smitherman of Troy, N. C., who sank 2 shafts in an attempt to work the mine. In 1910 or 1912 it was estimated that high-grade ore could easily be developed on the 65-foot level. The vein has been traced and prospected for  $2\frac{1}{2}$  miles northeast to the Reynolds mine. In the 1930's Mr. G. W. LaPiere of Charleston, West Virginia, attempted placer

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mining of the stream gravels, but the venture was not
1
                    successful.
2
3
      References:
                   C. B. Brown, 1934, written communication;
                    Bryson, 1936, p. 78;
 5-
                    Bryson, 1937, p. 25;
                    Emmons, 1856, p. 169;
7
                    Kerr and Hanna, 1888, p. 247;
                    Nitze and Hanna, 1896, p. 80;
                    Nitze and Wilkens, 1897, p. 52;
 10-
                    Pardee and Park, 1948, p. 85;
11
                    Pratt, 1907, p. 55;
12
                    Pratt, 1914, p. 45-46.
14
1
     Cary, southeast of, prospect
     Type: Cobalt
2
3
     Location: Wake County,
4
          Asbolite, or cobaltian wad, was observed out cropping for a
 5 --
     distance of one-quarter mile.
7
8
     Reference: Pratt, 1907, p. 17.
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Casher's Valley placer
     Type: Gold
2
      Location: Jackson county,
           Placer gold, chalcopyrite, and pyrite were noted.
 5--
     Reference: Genth and Kerr, 1881, p. 107.
7
     Catamba mine
     See Kings Mountain mine, Gaston County
      Cathey mine
      Type: Gold, copper
      Location: Mecklenburg County, 7 miles north of Charlotte.
           A large body of chalcopyrite ore carrying gold and pyrite
 5--
      was worked at this mine. At a depth 75 feet a body # "blue rock"
      or blue granite was encountered and the work was suspended.
9
      References: Genth and Kerr, 1881, p. 111;
                   Kerr and Hanna, 1888, p. 209;
 10-
                   Nitze and Hanna, 1896, p. 141;
12
                   Pardee and Park, 1948, p. 63.
 25
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```
Cathey, Green C., mine
1
      Type: Gold, copper
2
     Location: Mecklenburg County, 8 miles northwest of Charlotte;
3
 5-
           The ores carried gold, pyrite, and abundant chalcopyrite in
6
      the upper parts of the vein. In the 1880's a copper ore body of
7
      good grade was developed.
8
9
      References: Genth and Kerr, 1881, p. 111;
 10-
                   Kerr and Hanna, 1888, p. 210;
11
                   Nitze and Hanna, 1896, p. 139;
12
                   Pardee and Park, 1948, p. 63.
13
      Cedar Cove mine
 1
2
      See Dobson mine, McDowell County.
16
        Champion (Zeb Teeter) mine
 1
 2
        Type: Gold
        Location: Mecklenburg County, 6\frac{1}{2} miles east of Charlotte.
 4
       References: Pardee and Park, 1948, p. 63.
  5-
22
      Chapman mine
 1
      See Alexander mine, Mecklenburg County.
 2
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Charlotte mine
1
      Type: Gold
2
      Location: Mecklenburg County,
3
           Gold, pyrite, and chalcopyrite were noted in the ore.
 5 --
6
      Reference: Genth and Kerr, 1881, p. 111.
7
1
     Charlotte mine
     See St. Catherine mine, Mecklenburg County.
2
12
     Chatham mine
    Type: Gold
2
    Location: Chatham County, 3 to 4 miles east of Oxford.
3
    Reference: Pardee and Park, 1948, p. 62.
18
                 R.N.,
    R. Chatham, mine
1
    Type: Gold
2
3
    Location: furry County, near Elkin, on R. N. Chatham property.
 5-
         A gold-bearing vein was traced for 500 or 600 feet.
7
    Reference: Pratt, 1905, p. 15.
```

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Cheek mine
     Type: Copper
     Location: Moore County,
3
           Minerals found here include chalcopyrite, malachite, azurite,
 5-
     galena, red jasper, epidote, talc, calcite, and argentite.
7
     Reference: Genth and Kerr, 1881, p. 113.
     Cherry mine
     Type: Gold
3
     Location: Lincoln County, 4 miles south of Denver.
          A vein of white quartz carrying sulfides and gold occurred in
     granite gneiss country rock. A shaft said to be 100 feet deep was open
     to a depth of 20 feet in 1935, and an abandoned mill near zy on the
7
     property of Miss Lizzie Young was said to have been idle for 40 years.
 10- Reference: Pardee and Park, 1948, p. 76.
19
      Cherry Gap mine
 1
     Type: Copper
      Location: Jackson County, on the Cullowhee vein,
 4
      Reference: Weed, 1911, p. 137.
```

Chestnut Hill Wein 1 See Horton, J. C., shaft, Gaston County. 2 3 Chick mine Type: Gold, copper 2 Location: Chatham County, 1 mile north of Deep River. 3 Blue and green copper carbonates resulting from the alteration 5of chalcocite stain the surface at the outcrop, giving an unjustified appearance of richness to the ore. The ore carries gold and silver. The mine had been very little explored in 1887. 8 Reference: Kerr and Hanna, 1888, p. 214. 10 14 Chinquepin mine Type: Gold Location: Mecklenburg County, 1/4 mile northwest of Charlotte. Reference: Pardee and Park, 1948, p. 63. 5-20-21 22 23

24

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R. S. GUALLAND. . . .

```
Cid mine
 1
      Type: Copper, gold, silver
     Location: Davidson County 1 1/4 miles northeast of the Emmons mine,
 3
           6 miles east of Silver Hill.
  5-
           This mine is thought to be on the same lead as the Emmons. The
 6
      ore was rich copper ore, chalcopyrite and bornite, with black oxide
      and other surface alterations. The surface ore carried from 5 to 15
      ounces of silver with a little gold. The country rock is varied slate,
 9
      suggesting andesite or fragmental tuff. The mine was worked before
 10-
      1882.
11
12
      References: C. B. Brown, 1934, written communication;
ុ 13
                   Kerr and Hanna, 1888, p. 213-214;
14
                   Nitze and Hanna, 1896, p. 60-61;
  15-
                   Pardee and Park, 1948, p. 62;
16
                   Pogue, 1910, p. 117;
17
                   Pratt, 1907, p. 40.
18
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Clark mine
1
    Type: Gold
2
    Location: Mecklenburg County, 2 1/2 miles west of Charlotte.
3
4
         Gold, pyrite, and chalcopyrite were noted in two vein systems.
 5-
    northeast-southwest vein system was worked to a depth of 70 feet and
6
    for a distance of 1,200 feet along the strike. The east-west vein was
7
    worked to a depth of 78 feet. The ores were oxidized and carried values
8
     in gold and silver.
9
 10-
    References: Bryson, 1936, p. 117;
11
                  Genth and Kerr, 1881, p. 111;
12
                  Kerr and Hanna, 1888, p. 292;
13
                  Nitze and Hanna, 1896, p. 132;
14
                  Pardee and Park, 1948, p. 63.
 15-
16
17
     Clark, Gus, prospect
 1
     See Mauny, Fred, prospect, Gaston County.
2
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Clegg mine

Type: Copper

Location: Chatham County,

The vein is quartz with chalcopyrite, and calcite in curved plates enclosing masses of bituminous coal, in argillaceons and quartzitic schists. Fine specimens of azurite were found. Genth reported galena, cuprite, bornite, chrysocolla, pseudomalachite, cerussite, and malachite. In 1887 there was a 200-foot shaft.

Genth and Kerr, 1881, p. 98; References: Kerr and Hanna, 1888, p. 212.

## Clegg mine

Type: Copper

Location: Lee County, off U.S. Highway 1, 0.3 mile "behind" the Flat Creek Church in the northern part of the county and near the Chatham County line.

The mine and its dumps contain chrysocolla, malachite, azurite, chalcopyrite, pyrite, and chalcoite. There is a possibility that this may be the Clegg copper mine referred to by Genth and Kerr, 1881, and Kerr and Hanna, 1888, at an unspecified location in Chatham County.

Reference: Conley, 1958, p. 44.

```
Clegg mine
 1
      Type: Gold
 2
      Location: Moore County, 1/4 mile northwest of the Cagle mine, on
      the opposite (west) side of Cabin Creek, and 12 miles west of Hemp.
  5--
            The character of the ore is similar to that at the Cagle mine,
 6
      but the ore body is larger and of relatively lower grade. Gold is
 7
      disseminated through a 12-foot wide siliceous zone in felsic tuff
 8
      and sericite schist. The ore-body contains networks of small veinlets
      of quartz and is cross-cut by barren quartz veins.
                                                           This was originally
  10-
      an open-cut mine. Two shafts sunk some time after 1900 are the 128-
11
                                           unnamed shaft
      foot deep Gerhardt shaft, and another of over 110 feet deep
12
13
      References: Bryson, 1936, p. 68;
14
                   Conley, 1962 a, p. 24;
  15-
                   Kerr and Hanna, 1888, p. 245;
 16
                   Nitze and Hanna 1896, p. 56;
 17
                   Nitze and Wilkens, 1897, p. 57;
18
                   Pardee and Park, 1948, p. 64.
 19
      Clemmer mine
 1
 2
      Type: Gold
 3
      Location: Gaston County, 2 miles south of Stanley.
      Reference: Pardee and Park, 1948, p. 62.
```

Cline (Cruse) mine ı Type: Gold, Copper Location: Cabarrus County, 3-1/2 miles north of Mount Pleasant. The ore forms lenses from one to 3 feet thick in a vein striking 5 --N. 35° W. in greenstone schist country rock. Chalcopyrite and pyrite with gold occur in a quartz-siderite gangue which contains some specularite. Traces of scheelite were detected in some of the rocks. Chalcopyrite impregnates the country rock in some places up to a distance of 7 feet from the vein. The mine was first worked for gold 11 in 1895. In 1901-1902 the mine was worked as a copper mine, and 12 2 to 3 carloads of high-grade copper-gold ore were produced. At that time there were three shafts of depths of 35, 40, and either 140 or 14 240 feet. In 1936 the deep shaft was unwatered. At that time gold values of \$2 to \$105 per ton, with an average of \$38, and 7% copper 16 were reported. The mine was examined by the U.S. Bureau of Mines in 17 1944 and in 1946, when four diamond-drill holes were put down. Results 18 of this drilling showed the vein to pinch at depth and to carry no 19 mineralization of economic importance. References: Beck, 1946, 4 p.; . i Bryson, 1937, p. 17-18; 22 Hickman, 1948, 5 p.; Laney, 1910, p. 113; 24 Pardee and Park, 1948, p. 71; Pratt, 1902, p. 24-25.

```
Coates mine
1
    Type: Gold
2
    Location: Cabarrus County, 4 miles northeast of Mount Pleasant.
3
          Copper minerals and gold were found in a quartz vein in quartz
 5-
     sericite schist derived from a coarse acid tuff. The mine was worked
6
    in about 1898, when there was a 75-foot shaft.
7
    References: C. B. Brown, 1934, written communication;
9
                  Pardee and Park, 1948, p. 62.
 10-
11
     Coburn mine
     Type: Gold
2
     Location: Randolph County, 7 miles southwest of Asheboro. -
3
4
     Reference: Pardee and Park, 1948, p. 64.
 5--
17
      Coffin mine
 1
           See Deep River mine, Guilford County.
 2
21
      Coggins mine
 1
            See Appalachian mine, Montgomery County.
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Coggins prospect

Type: Copper

Location: Jackson County, about  $\frac{1}{2}$  mile up a tributary of Dodgen Creek

No sulfides were found in hornblende gneiss country rock. There was a 25-foot shaft.

Reference: G. H. Espenshade, 1944, written communication.

Coggins, Sallie, mine

Type: Gold

Appalachian or Location: Montgomery County, west of the Coggins mine.

Strengers and lenses of rusty quartz carrying sphalerite, galena, and pyrite, occur parallel to the schistosity of the country rock. The main opening is an open cut in a hillside about 75 feet long and 30 feet wide. At the bottom under 35 feet of water is a 60-foot shaft. About 150 feet northwest is a ledge known as the "West Lead". In 1896 and 1897 a hydraulic plant and a 10-stamp mill were operated here. Between 1906 and 1916 about 123.5 ounces of gold were produced.

Reference: Pardee and Park, 1948, p. 82.

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Cole farm prospect
1
      Type: Tin
2
      Location: Gaston County, about 1/5 mile south of the Ormond-Carr
3
           prospect.
 5--
           Cassiterite occurs in greisen gangue in muscovite schist and
      gneiss and hornblende gneiss country rock.
7
8
      Reference: Kesler, 1942, table 18.
9
 1
      College Mine
                    Copper
      Type:
 3
      Location:
                    Randolph County, 13 miles southwest of Greensboro on
                    a small stream.
  5-
                         Chalcopyrite, pyrite, and calcite occur in white
 7
                    quartz veins.
                    Mining Magazine, v. 2, No. 2, p. 173, 198, 1854,
      Reference:
 9
19
     Colossus mine
 1
     See Howie mine, Union County.
 2
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1
     Compact school, prospect 1,675 feet S. 60° E.
 2
      Type: Tin
 3
     Location: Cleveland County
 4
  5-
           Cassiterite occurs in greisen gangue in muscovite schist and
     gneiss country rocks.
 7
 8
     Reference: Kesler, 1942, table 18, plate 39.
      Compact School, prospect 3,000 feet S. 64° E.
 1
      Type: Tin
2
      Location: Cleveland County
. 4
           Float pegmatite and grains of cassiterite, columbite, and
 5-
      and alusite were found in soil residual from constalline limestone.
7
      Reference: Kesler, 1942, table 18; plate 39.
8
19
      Compact School, prospect 3,025 feet S. 3° E.
 1
      Type: Tin
2
      Location: Cleveland County
3
4
           Cassiterite occurs in greisen gangue in muscovite schist and
 5-
      gneiss country rocks.
 7
      Reference: Kesler, 1942, table 18; plate 39.
```

```
Condon (Main) shaft mine
 1
      Type: Tin
 2
     Location: Lincoln County, now part of the Ka-Mi-Tin mine.
 3
           Eight thin lenticular ore bodies carrying cassiterite in muscovite
  5--
      schist or gneiss. Ore in greisen gangue was also seen in an opening
      0.3 mile south of the Condon shaft.
 7
           The Condon shaft and the Main shaft may be the two shafts, 102-
 8
      and 40-feet deep, of the Main shaft mine, which has 1,319 feet of
      under ground workings.
  10-
 11
     References: Kes ler, 1942, table 18;
 12
                   Pratt, 1907, p. 20-22.
, 13
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Conrad Hill (Dodge Hill) mine

Type: Gold, copper

Location: Davidson County, 6 miles southeast of Lexington, 1at. 35°

47'N long. 80° 10'N \_\_\_\_

The ores are auriferous pyrite and chalcopyrite in a gangue of quartz, hematite, and siderite. The country rock is chiefly a sericite schist derived from tuffs of the volcanic series. As many as 6 veins were described, of which 3 strike northeast about parallel with the foliation, and the others intersect the foliation at various angles. From the surface to a depth of 50 feet the ore consisted of quartz with brown iron oxides and was valuable for gold only. Chalcopyrite appeared at 50 feet, and at 100 feet chalcopyrite and ankerite had completely displaced iron oxides. Between 1832 and 1835 the eastern tract of the mine was worked by Roswell King and produced 37,190 dwt. of gold and about 50,000 leb. of copper. An area west of this was mined by Governor Morehead who produced between 80,000 and 295,000 dwt. of gold. After 1858 the mine was closed until 1880. At that time extensive developments were begun by J. P. McKee, who deepened the workings, opening one shaft to 400; and extracted much ore which was greated in milling and smelting plants.built on the property. Operations ceased in 1884. After 1884 the western tract of the mine was operated, in 1902, and in 1912. The mine was unwatered and operated briefly in 1936 by George Wearing. In 1943-1944 the U.S. Bureau of Mines sampled and mapped the mine. Much of the deposit

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## Conrad Hill (Dodge Hill) mine (con't)

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is not developed below the oxidized zone. In 1934 there were large
1
      dumps and an extensive area of large pits and shafts.
2
3
      References: Ballard and Clayton, 1948;
                   Emmons, 1856, p. 141-154;
 5-
                   Kerr and Hanna, 1888, p. 268-274;
                   Nitze and Hanna, 1896, p. 68-74;
                   Pardee and Park, 1948, p. 72;
                   Pogue, 1910, p. 108;
                   Weed, 1900, p. 479
 10-
      Conroy mine
 1
            See Davis Mountain mine, Randolph County (
 2
14
      Conyers mine
 1
      Type: Gold
 2
      Location: Nash County, 7 miles from Whitakers on Fishing Creek.
 3
            In 1896 a 30-foot shaft had been sunk on an 18-inch quartz vein
  5 --
      carrying brown hematite and sulfide ore. Considerable placer material
      was also worked.
 7
      References: Bryson, 1936, p. 62;
                   Nitze and Hanna, 1896, p. 27;
 10-
                   Pardee and Park, 1948, p. 64. •
11
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Cope mine 1 Type: Gold 2 Location: Rowan County, 3 Genth and Kerr, 1881, p. 116. Reference: 5 --Copper King mine 1 Type: Copper 2 Location: Person County, 3½ miles southwest of Virgilina. 3 There is apparently no well-defined vein, and the ore occurs in 5an epidotized portion of the country rock in which more or less 6 quartz has been deposited in irregular areas or masses and in lenses 7 and stringers. The ore minerals are bornite, chalcocite, klaprothite, malachite, azurite, and cuprite, and are intimately associated with 9 the gangue minerals epidote, quartz, calcite, chlorite, plagioclase, 10and hematite. In 1917 the mine belonged to J. H. Morong; it was 11 developed by a 100-foot prospect shaft, and there were a few thousand 12 poinds of high-grade ore on a platform at the collar of the shaft. 13 14 Reference: Laney, 1917, p. 157-158. 15-21 Copper Knob mine 1 -- see Gap Creek mine, Ashe County 2

1 Copper World mine 2 Type: Copper Location: Person County, 1-1/4 miles southwest of the Gillis mine. 3 The mine is on the strike of the Gillis vein and is in green-5stone schist country rock. The ore is an intimate mixture of 6 bornite and chalcorite with oxidized copper minerals near the surface in a gangue of quartz, epidote, calcite, and chlorite. The mine was first opened in 1882. In 1888 there were 2 shafts, the North Shaft, 100 feet deep, and a flooded South Shaft. Around 10-11 1900 a 60-foot shaft with drifts at 30 and 60 feet was sunk by Colonel Stiff, who owned the mine at that time. He shipped 8 to 10 12 tons of high-grade ore. 14 References: Kerr and Hanna, 1888, p. 219; 15-16 Laney, 1917, p. 158; Weed, 1900, p. 463; 17 Weed, 1911, p. 83. 18 19 Copple mine 1 See Spencer mine, Randolph County( 2 23 24

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(Fustis)

Cornfield Property

Type: Copper

Location: Granville County, in the southeastern part of the

Virgilina town site. <

Three prospect shafts belonging to the William M. Pannebaker estate were opened in the 1890's, but were soon abandoned and were not reopened until 1915. The Cornfield No. 1 shaft/about 55 feet deep In this shaft were chalcocite and bornite were found in Virgilina greenstone. graphically intergrown, in a gangue of quartz, calcite, epidote, and chlorite. The Cornfield No. 2 shaft is located 400 feet east of No. 1 in the same type of rock, but the ore contained unusually large amounts of chalcopyrite and pyrite in addition to chalcocite and bornite, and minor azurite, malachite, klaprothite(?), argentite, native copper, and cuprite. The "Native shaft", in the southern part of town, is in an epidotized and silicified belt of the firgilina Greenstone, rather than in definite fissure veins in the greenstone. The deposit is similar to Weed's Catoctin type of copper deposits, and contains native copper, cuprite, malachite, and azurite in a gangue of quartz and epidote.

References: Laney, 1917, p. 78, 153-155;

Weed, 1904,  $\rho$ : 463.

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1
     Corpening mine
     Type: Gold
2
     Location: Caldwell County, near the Baker mine on John's River.
3
 5--
          Some prospecting and development work was done in 1911 by J. A. Dula
6
     of Lenoir.
7
8
     References: Kerr and Hanna, 1888, p. 308;
9
                   Pratt, 1914, p. 19.
 10-
11
      Cosby mine
 1
      See Crosby mine, Cabarrus County.
2
14
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      Cotton mine
 1
            See Donaldson mine, Moore County
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Cotton Patch mine

Type: Gold

Location: Stanly County, 2 miles east of New London,

The ore occurs as free gold in a quartz vein approximately 18 inches wide in andesitic tuff, country rock. The gold nuggest are coarse, usually crystalline, and range in size from 1/16 inch to over 1/4 inch across. Placer mining was done before 1865. In 1958 a trench was bulldozed but sufficient reserves were not discovered. In 1961 the mine was reopened to the public for mineral specimen collecting.

Reference: Conley, 1962, p. 18.

Cotts, J. H..

Type: Gold

Location: Randolph County,

> Gold occurs in pockets or quartz stringers in weathered pericitic schist of a deep brownish-red color. In 1934 a line of shallow pits not over 10 feet deep was being put down extending up a [fill] There was a 3-stamp mill.

Reference: C. B. Brown, 1934, written communication.

```
County Home mine
1
            See Jones mine, Randolph County.
2
3
 1
     County Line mine
      See Butler mine, Davie County.
 2
6
     Jesse Cox mine
1
    Type: Gold
2
    Location: Anson County, 2 miles southeast of Wadesboro.
3
4
          Quartz veins in slate are similar to the Hamilton mine nearby.
 5-
6
    References: Bryson, 1936, p. 102;
7
                  Kerr and Hanna, 1888, p. 275;
8
                  Nitze and Hanna, 1896, p. 106;
                  Nitze and Wilkens, 1897, p. 57;
 10-
18
     Craig-Davidson mine
1
     See Caldwell mine, Mecklenburg County.
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Type: Gold

Crawford (Ingram) mine

Location: Stanley County, 4 miles northeast of Albermarle, on a branch of Mountain Creek.

The placer deposit lies in a stream valley 100 to 400 feet wide on slate bedrock. It is composed of angular fragments of quarta and slate in a clayey matrix cemented with iron oxides, and is locally called "grit". The deposit is  $1\frac{1}{2}$  to 2 feet thick in the center of the valley and is overlain by 2 to 4 feet of waste alluvium. On the hillside west of the placer deposit are several quartz veins, mostly barren, but small amounts of gold have been taken from them. gold in the placer is coarse, the smallest particles being as large as pinheads, and large nuggets, up to 10 lbs. in weight have been found. No coarse gold was found in the veins.

The placer was discovered in August, 1892 on the W. S. Ingram farm and was worked by tributors for 2 years. In 1894 the property was bought by the Crawford Mining Company of New York. The methods employed by that company in treating the ore are described by Nitze and Wilkens.

References: Bryson, 1936, p. 82-83;

Nitze and Hanna, 1896, p. 82-83;

Nitze and Wilkens, 1897, p. 91-95;

Pardee and Park, 1948, p. 93.

Crayton mine 1 Type: Gold 2 Location: Cabarrus County,  $2\frac{1}{2}$  miles north of Georgeville. 3 Gold and pyrite occur in veins and stringers of quartz and 5-calcite in a slaty rock of the volcanic series. The ore-bearing 6 lode is 2 to 6 feet wide, follows a fracture zone in the slate, and is cut by low-angle faults dipping westward, with reverse or overthrust movements. The lode was discovered in about 1932 and was 9 explored in 1932, 1933, and 1934 by three shafts, the deepest of 10which was 88 feet deep, with short levels driven at 30 feet and at 11 the bottom. 12 13 References: C. B. Brown, 1934, written communication; 14 Pardee and Park, 1948, p. 66. 15--16 Crosby (Cosby, Poplan) mine 2 Type: Gold Location: Cabarrus County, one mile east of Allen, near the Mecklenburg County line. ~ 5-In 1934 two old shafts were seen on a quartz vein in greenstone. 6 8 References: C. B. Brown, 1934, written communication; Pardee and Park, 1948, p. 62. 9 10-

```
Crosby mine
 1
       Type: Gold
 2
       Location: Mecklenburg County,
 3
            Gold and pyrite were noted in ore.
 6
       Reference: Genth and Kerr, 1881, p. 111.
7
 8
     Crosby No. 2 mine
 1
     Type: Gold
 2
     Location: Cabarrus County, 1\frac{1}{2} miles north of Georgeville.
 3
          Gold occurred in quartz veins associated with greenstone country
 5--
     rock. The mine was worked about 1867.
 6
 7
     References: C. B. Brown, 1934, written communication;
                   Pardee and Park, 1948, p. 62.
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Cross mine 1 Type: Gold 2 Location: Davidson County, 1 1/4 miles southwest of the Peters mine. 3 Oxidized ores carrying free-milling gold extended to a depth of 5-70 feet. Siderite, chalcopyrite, and pyrite were seen in the ore. 6 The mine was discovered before 1860 and was prospected from 1860 to 7 1865. A shaft was sunk to a depth of 50 feet, and was deepened to 8 75 feet in 1904. 10-References: C. B. Brown, 1934, written communication; 11 Pogue, 1910, p. 113-115 12 13 Cross (Peysour) (Pasour) Mountain Type: Cobalt Location: Gaston County, 1 mile northeast of the Long Creek mine, near the summit and descending the west slope of Cross Mountain. . 5 -A bank of rock, about 15 feet wide, contains veins and seams of 6 asbolite or cobaltian wad mixed with limonite and quartz in talcose 7 schist country rock. A number of openings were made on the cobalt seams in the 1850's, and a specimen from the west side of Cross Mountain assayed 13.26 percent nickel and cobalt. 11 12 References: Pratt, 1907, p. 18; Stuckey, 1965, p. 278-279;

Wurtz, 1859, p. 27.

```
Cross-Cut mine
    Type: Copper
    Location: Person County, one mile southwest of the main shaft at the
         Durgy mine.
 5~
         This is the gross-gut vein described under the Durgy mine. This
    vein trends N. 30° W. cutting the schistosity of the country rock which
    is about N. 30° E.; hence the name Cross-gut vein. The vein was small and the
    opening, a shaft 70 or 80 feet deep, was in the bed of a small stream,
    so that little could be seen except malachite stains. Quartz veins a
    short distance to the southwest and northwest show copper straining,
11
12
    Reference: Laney, 1917, p. 143-144.
13
14
      Crouse mine
 1
      See Oliver mine, Gaston County.
2
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## Crowder's Mountain (Caledonia) mine 1 Type: Gold 2 Location: Gaston County, 2 miles S. 60° E. of The Pinnacle, and 3 about 4 miles south east of the Kings Mountain mine. 4 5~ A mineralized zone 8 to 10 feet wide in quartzite and sericite 6 chlorite schist country rocks carries gold, pyrite, chalcopyrite, 7 argentiferous galena, sphalerite, pyrophyllite, barite, hematite, 8 and limonite. The mine was opened just after 1865, when two shafts 9 about 500 feet apart were put down. One of the shafts was reopened 10in 1934 by J. N. Smith. Shallow pits 1,000 feet to the southwest 11 are on a gold-bearing zone in quartzite. 12 13 References: Bryson, 1936, p. 128-129; 14 Genth and Kerr, 1881, p. 102; 15--Kerr and Hanna, 1888, p. 306; 16 Nitze and Hanna, 1896, p. 147; 17 Pardee and Park, 1948, p. 74. 18 19 20-21 22 23 24 25

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Crowell mine

Type: Gold

Location: Stanly County, 12 miles northeast of New London near Bethel Church, on a tract crossed by Mountain Creek.

This mine is near the Parker mine and similar in geology. The country rock is silicified chlorite and sericite schist containing finely disseminated pyrite. The lode is 4 to 7 feet wide with a narrow streak of ore and differs little from the country rock, as both are auriferous. At the north end of the property quartz stringers 3 or 4 inches in width often show gold in considerable quantity.

The mine was first worked for placer gold. A lode is said to have been discovered about 1887 and worked for several years by Thomas Jefferson Crowell, the ore being treated in Chilean mills and, at one time, in a 5-stamp mill. It was worked to a depth of 125 feet, and surface openings extend in a northwest direction for 230 feet. In the 1930's the property was operated by Mr. Cassidy, of Charleston, W. Va., but the ore was of low grade and difficult to treat. The recovery plant was dismantled and taken to the Haile mine in South Carolina.

References: C. B. Brown, 1934, written communication;

Bryson, 1936, p. 81-82;

Bryson, 1937, p. 20;

Kerr and Hanna, 1888, p. 259;

Nitze and Hanna, 1896, p. 84-85;

Nitze and Wilkens, 1897, p. 56;

Pardee and Park, 1948, p. 97.

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Crowell (Bright Light) mine
1
      Type: Gold
2
      Location: Union County, about 14 miles (air line) north of Monroe,
3
           in the extreme northwestern corner of the county.
 5 -
           Three veins of cellular quartz carry galena, pyrite, and a
6
      trace of chalcopyrite with gold and silver in sericitic phyllite
7
      country rock. The mine was opened in 1882 and developed to a depth
8
      of 80 feet. Some ore was produced and was treated in a 15-stamp
      mill. Assays of the ore range from 0.157 to 2.067 ounces of gold
 10-
      and $0.32 to $10.21 in silver per ton.
11
12
      References: Brown, C. B., 1934, written communication;
13
                   Bryson, 1936, p. 91-92;
14
                   Kerr and Hanna, 1888, p. 263;
 15-
                   Nitze and Hanna, 1896, p. 94-95;
16
                   Pardee and Park, 1948, p. 103
17
18
      Crowell's mine
 1
      Type: Gold
 2
 3
      Location: Cabarrus County,
 4
           Gold, pyrite, and galena are reported.
  5-
 6
      Reference: Genth and Kerr, 1881, p. 96.
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1
      Crump mine
      Type: Gold
2
      Location: Mecklenburg County.
           Gold and pyrite were noted in ore.
 5 --
6
      Reference: Genth and Kerr, 1881, p. 111.
7
8
9
     Crump mine
1
     Type: Gold
2
     Location: Montgomery County, 4 miles south of west of Ophir.
3
     Reference: Pardee and Park, 1948, p. 63.
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Crump mine
 1
      Type: Gold
 2
      Location: Union County, 2 1/2 miles southeast of the Stewart mine, in
           Vance Township.
  5~
           Veins of quartz with disseminated pyrite carrying gold and silver
 6
      are found in a dense type country rock. The mine is noted for its
 7
      remarkable pockets, and "splendid and peculiar neggets", in which
 8
      nearly all the gold occurs. The mine was last worked about 1890.
 9
      workings reached a depth of 120 feet and included 3 shafts and several
  10-
      pits distributed along two parallel lines about 150 feet apart.
11
12
      References: Brown, C. B., 1934, written communication;
, 13
                   Bryson, 1936, p. 93;
14
                   Nitze and Hanna, 1896, p. 98;
  15-
                   Pardee and Park, 1948, p. 103.
16
       Cruse mine
 1
       See Cline mine, Cabarrus County.
 2
       Cullen's mine
 1
       Type: Copper, gold
 2
       Location: Cabarrus County,
 3
            Tetradymite, cuprite cubes, pseudomalachite, scheelite, azurite,
  5 --
        and malachite were noted.
 6
 7
       References: Genth, 1891, p. 80;
```

Genth and Kerr, 1881, p. 95.

1 Cullowhee mine

Type: Copper

Location: Jackson County, near the crest of Cullowhee Mountain, about  $1\frac{1}{2}$  miles west of the Tuckasegee River and nearly 2,000 feet above the river.

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Chalcopyrite and pyrrhotite massive sulfide ore occur disseminated in an orebody 200 to 400 feet long in muscorite schist and amphibolite or hornblende gneiss frear the contact of Carolina Gneiss and the Ream Gneiss. Secondary copper minerals and gossan were found overlying the primary ore. Other openings made along the Cullowhee ore zone in the 1860's were known as the Cambuco, Wolf County, Cherry Gap, and Loudermilk mines. Little is known of these. Mining for secondary copper ore was carried on in the 1860's, and again during 1900 to 1910 when a small smelter was also operated. During 1929 and 1930 the mine was operated by the Tennessee Copper Company, and 4,500 tons of ore averaging 4% copper was shipped to Ducktown. The mine was opened by an adit and a 177-foot shaft with levels at 50, 100, and 150 feet.

References: G. H. Espenshade, 1944, written communication;

Kendall, 1953, p. 112-123;

A. R. Kinkel, 1957, written communication;

Ross, 1935, p. 89-90; Stricking, 1965, p. 286; Wee, 1911, p. 138-140.

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Culp mine
 1
          See Little Fritz mine, Stanly County
 2
     Curry mine
 1
     Type: Gold
     Location: Montgomery County, 2 miles west of Candor.
 3
     Reference: Pardee and Park, 1948, p. 63.
     Dameron mine
      Type: Gold
 2
      Location: Gaston County, 7 miles southeast of Gastonia.
      Reference: Pardee and Park, 1948, p. 62.
  5-
 15-
     Danelly's Creek mine
 1
     Type: Gold
     Location: Chatham County.
 3
           The ore carried gold, pyrite, and chlorite.
  5--
     Reference: Genth and Kerr, 1881, p. 99.
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## Dark Springs mine

Type: Gold

Location: Montgomery County,

Quartz stringers with calcite and pyrite were seen in a hard siliceous tuff and interbedded porphry. The mine was worked about 1915 and 1916.

Reference: C. B. Brown, 1934, written communication.

### Davidson mine

See Emmons mine, Davidson County -

#### Davidson mine

Type: Gold

Location: Mecklenburg County, 2 miles west of Charlotte on the south end of Davidson Hill, a ridge 1/2 mile long.

Gold and pyrite were noted in the ore. A quartz vein 3 to 4 feet wide was worked to a depth of 80 feet in the 1880's. The ore was reputed to be good.

References: Genth and Kerr, 1881, p. 11;

Kerr and Hanna, 1888, p. 286;

Nitze and Hanna, 1896, p. 126;

Pardee and Park, 1948, p. 63.

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Davidson and Wilson mine
 1
      Type: Gold
2
      Location: Rowan County, 8 to 10 miles east of Salisbury.
3
 5~
      Reference: Kerr and Hanna, 1888, p. 282.
 1
      Davies mine
2
      Type: Copper
3
      Location: Jackson County.
 5--
      Reference: Weed, 1911, p. 137.
13
      Davis mine
 1
      Type: Gold
 2
      Location: Halifax County, near the Portis mine.
3
      References: Bryson, 1936, p. 63;
 5 ---
                    Kerr and Hanna, 1888, p. 241;
6
                    Nitze and Hanna, 1896, p. 27;
 7
                    Nitze and Wilkens, 1897, p. 43.
       Davis mine
  1
             See Morris Mountain mine, Montgomery County
 2
      Davis mine
            See Ophir mine, Montgomery County (s. GOVERNMENT PRINTING OFFICE: 1959 0 - 511171
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Davis mine 1 2 Type: Gold Location: Polk County, at Sandy Plains, 5-Reference: Genth and Kerr, 1881, p. 115. 6 Davis mine 2 Type: Gold Location: Union County, about 3, feet northwest of the Moore Hill 3 4 mine, and in the same group of mines. 5-6 The ores are described under the Moore Hill mine. mine was opened before the Civil War and has been worked for a length of 900 feet. In 1893 the "Road" shaft had been drilled to a depth of 150 feet. In 1906 to 1908 the mine was operated by the Winona Mining Corp. under R. L. Welch. The mine was last worked 10in 1919. At that time the various openings were known as the "New" 11 shaft, 195 feet deep; "Norcutt" shaft, 50 feet deep; "Old Dill" shaft, 12 66 feet deep; "Old Hickory" shaft; "New Hickory" shaft, 95 feet deep; 14 and "Paxton" shaft, 40 feet deep. 15-References: Brown, C. B., 1934, written communication; 16 Bryson, 1936, p. 95-96; 17 Kerr and Hanna, 1888, p. 262-263; 18 19 Nitze and Hanna, 1896, p. 100-102; 20-Pardee and Park, 1943, p. 101-102.

Davis Mountain (Dorr's Hill, McAllister, Conroy) mine 1 Type: Gold 2 Location: Randolph County, 3½ to 4 miles west to southwest of 3 Asheboro. 5-The country rock is altered andesitic tuff intersected by aurigerous quartz stringers and a mineralized shear zone. Saprolite covers much of the area. The Davis Hill and McAllister workings are at the base of the hill near the stream and consist of a shaft and tunnel. The main operations, the Davis Mountain or Conroy, consisted 10of hydraulic and sluicing operations on the hillside. Pits and 11 trenches in saprolite extend for more than 1 mile. 12 13 References: C. B. Brown, 1934, written communication; 14 Nitze and Hanna, 1896, p. 59; 15~ Nitze and Wilkens 1897, p. 47; 16 . Pardee and Park, 1948, p. 64; 17 Pratt, 1907, p. 45 18 19 20-22 23 24 25

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Deep Flat mine
1
      Type: Gold
2
      Location: Montgomery County, on the west flank of the Uharie
3
           Mountains.
 5 -
           This was a placer mine in gravel underlying saprolite. Mining
6
      was hindered by the scarcity of water and the tenacious nature of
      the saprolite.
8
9
      References: Bryson, 1936, p. 78;
 10-
                   Kerr and Hanna, 1888, p. 248;
11
                   Nitze and Hanna, 1896, p. 80;
12
                   Nitze and Wilkens, 1897, p. 52;
13
                   Pardee and Park, 1948, p. 63.
14
 15-
 1
     Deep Gap mine
     --see Gap Creek mine, Ashe County
2
 20~
21
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Deep River (Coffin) mine 1 Type: Gold, copper 2 Location: Guilford County, 2 miles south of the Lindsay mine, (4 miles northeast of High Point or) 2 miles east of High Point. 5 -A quartz vein carrying auriferous pyrite and chalcopyrite in micaceout micackons schist or granite country rock varied in thickness from 18 inches to 12 feet. It yielded \$5 to \$6 per ton in gold and 2 to 3 8 percent copper. The mine was operated as the Coffin mine in 1853 by 9 the Potomac Copper Company. Nothing is known of the mine until 1905, 10when it was abandoned by the Coronora Mining Company and bought at 11 sheriff's sale by Johnson H. Redding of High Point. Mr. J. A. Allred 12 was the foreman. The main shaft was 200 feet deep with considerable 13 drifting, and, 3 other shallow shafts. 14 15-References: C. B. Brown, 1934, written communication; 16 Kerr and Hanna, 1888, p. 278; 17 Mining Magazine, 1853, v. 1, no. 4, p. 522; 18 Nitze and Hanna, 1896, p. 115; 19 Pardee and Park, 1948, p. 62; 20-Pratt, 1907, p. 37-38. 21 22 Defender 1 See Stackhouse mine, Madison County. 2

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1
     Delft (Delph, Delk, Lytton, Empire, Miller, Brown Hill) mine
     Type: Gold
     Location: Randolph County, 2-1/2 miles northwest of Jackson Creek,
     near the Lafflin mine.
                              Genth and Kerr locate the Delk mine across
     the line in Davidson County.
        This mine is similar to the Lafflin and Jones-Keystone mines.
     occurs in decomposed iron-stained schist. Pyrite, hematite, and
     limonite were also noted in the ore. The mine was operated in the
     1850's and also in 1933-1934.
11
12
     References:
                  C. B. Brown, 1934, written communcation;
13
                  Emmons, 1856, p. 132;
14
                  Genth and Kerr, 1881, p. 101;
 15--
                  Kerr and Hanna, 1888, p. 254;
16
                  Nitze and Hanna, 1896, p. 59;
17
                  Nitze and Wilkens, 1897, p. 47;
18
                  Pardee and Park, 1948, p. 64.
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### Denton mine

Type: Gold

1

2

3

5 ---

Location: Davidson County,

Exploration was done by Roland F. Beers in 1958 under a DMEA contract for copper, lead, and zinc.

Reference: Stucky and Conrad, 1961, p. 6, 7.

1 Derr mine 2 Type: Gold Location: Gaston County, 17 miles west of Charlotte and 2 miles east 3 4 of Stanley. 5 -References: Nitze and Hanna, 1896, p. 148; 6 Nitze and Wilkens, 1897, p. 66; 7 8 Pardee and Park, 1948, p. 62. 9 Dixie Queen (Newell) mine 1 Type: Gold, copper 2 Location: Cabarrus County, 2 miles northeast of Pioneer Mills, and 3 3 miles south of Rocky River. 5--A two-foot quartz vein in a creek bottom in granite and chloritic 6 country rock carried gold, chalcicite, chalcopyrite, and pyrite. The 7 mine was first operated about 1895 to 1900, when 2 shafts were put 8 down. It was chiefly a copper mine, but produced a little gold. It was operated in 1923 by a Mr. Chappell, who is reported to have taken 10out two carloads of high-grade ore. The mine was again active during 11 World War II, and in 1943 Terry and Knowlton shipped one carload of 12 3% copper ore containing gold and silver. 13 14 References: C. B. Brown, 1934, written communication; 15--Murdock, 1950, p. 8; 16 Pardee and Park, 1948, p. 71. 17

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Dixon mine
1
    Type: Gold
2
    Location: Yadkin County, 8 miles southeast of Yadkinville.
3
 5-
         Gold-bearing sugary quartz veins occur in mica schist intersected
6
    in places by diabase dikes. The veins form lenticular bodies and
7
     stringers and contain pyrite and chalcopyrite at depth.
8
          The mine was discovered in 1894 or 1895 and was developed through
    a 40-foot vertical shaft with 140 feet of drifts to the northeast and
     southwest. Work was continued for a short time only, but 100 tons of
11
    ore taken out had a reported value of $5 per ton. The mine was reopened
12
    in 1913-14, a stamp mill and cyanide plant were erected, and work was
13
    continued for about two years, in conjunction with the neighboring
14
    Gross mine.
 15-
16
    References: Bryson, 1936, p. 131-132;
17
                  Nitze and Hanna, 1896, p. 151;
18
                  Nitze and Wilkens, 1897, p. 68;
19
                  Pardee and Park, 1948, p. 104.
 20-
       Dixon's mine
 1
       Type: Gold
 2
       Location: Alamance County, on both sides of the Haw River.
 3
              was found
  5 —
            Gold, in placers.
```

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1
     Dixon School prospect
2
     Type: Tin
     Location: Cleveland County, 3,550 feet from Highway 29 along Dixon
3
          School road, and 215 feet to the west.
 5 -
          Cassiterite occurs in greisen and feldspathic gangue in
6
     spodumene pegmatite in muscovite schist and gneiss and hornblende
7
8
     gneiss.
     Reference: Kesler, 1942, table 18; plate 39.
 10-
11
      Dobson (Dodson's, Cedar Cove) mine
 1
      Type: Lead
2
3
      Location: McDowell County, at Cedar Cove,
4
           Sphalerite and (calcite) both granular and compact) were noted
 5 --
      in the ore.
7
8
      References: Genth and Kerr, 1881, p. 110;
9
                   Kerr and Hanna, 1888, p. 202.
21
22
     Dodge Hill mine
1
           See Conrad Hill mine, Davidson County. _
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Donaldson (Cotton) mine 1 Type: Gold 2 Location: Moore County, 4 miles northeast of Carter, and 0.4 mile southeast of the Ritter mine. 5 ---Gold occurs in a quartz vein 8 inches wide and disseminated in highly sheared felsic lithic-crystal tuff. The vein contains pink orthoclase phenocrysts and azurite and malachite stains. This mine was worked as a placer in the 1850's and early 1860's. Later a 60-foot shaft was put down. 10-11 References: Conley, 1962 a, p. 26-27; 12 Pardee and Park, 1948, p. 64. 13 14 Donnell mine 1 See Heath mine, Guilford County. 2 18 Dorr's Hill mine 1 See Davis Mountain mine, Randolph County 2 21 22 23 24 25

# 1 Double Branch mine 2 Type: Gold 3 Location: Polk County, 9 miles southeast of Landrom. South Mountain area. 5 -6 Narrow quartz veins carrying pyrite with gold and silver were 7 developed in 1910 by five shafts. One 10-stamp mill and one 3-stamp 8 mill were erected. 9 10-References: Bryson, 1936, p. 142-143; 11 Nitze and Hanna, 1896, p. 174; 12 Pratt and Berry, 1919, p. 25; 13 U.S.G.S. Mineral Resources, 1910, p. 686; 14 Dowd (Rush) mine Type: Gold 2 Location: Randolph County, 8 miles southwest of Asheboro. 3 4 In 1934 white gritty saprolite carrying fine gold was seen 5overlying porphyritic rhyolite, flow breccia, and tuff. No quartz 6 seams were noted. Numerous caved shafts and pits were seen 7 extending over a considerable area. The mine was worked around 1850, and again around 1930. 10-References: C. B. Brown, 1934, written communication; 11 Pardee and Park, 1948, p. 64.

```
Drexler mine
1
           See Tuxler mine, Rowan County
2
3
     Dry Hollow mine
     Type: Gold
2
     Location: Montgomery County, on the western flank of the Uharie
3
          Mountains, 3 miles east of Troy, at the Carter mine.
4
 5 --
           This was a placer mine which lay along the outcrop of the vein
6
     at the Carter mine. Small tracts were leased in the hollow to miners
7
     and a royalty paid on the gold won. Lack of water prevented
     septematic work. About $250,000 was produced.
9
 10-
     References: C. B. Brown, 1934, written communication;
                   Bryson, 1936, p. 78;
12
                   Kerr and Hanna, 1888, p. 248;
13
                   Nitze and Hanna, 1896, p. 80;
14
                   Nitze and Wilkens, 1897, p. 52;
 15-
                   Pardee and Park, 1948, p. 63;
                   Pratt, 1914, p. 45.
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Dry Hollow and Jenkins (Jenkens) mines 1 Type: Gold 2 Location: Moore County, 2 miles south of Hemp; 2 1/4 miles southwest 3 of Robbins; 1,300 feet southwest of and along a small stream south of the Standard Mineral Company's pyrophyllite mine. 5 --The Jenkin's orebody is in selicified felsic tuff. It was 7 first opened before 1865 and was worked intermittently until 1890. In 1912 an attempt was made by Charlie and Paul Ger ardt to reopen 9 the mine. There were 2 shafts, one 85 feet deep. 10-Mr. Ashley Paris found a 3 ounce gold nugget in the stream 11 some time before 1896. For some years afterward it was mined 12 occasionally as the Dry Hollow placer mine. The mine site is now 13 covered by pyrophyllite mine dumps. 14 15--References: Conley, 1962a, p. 26; 16 Pardee and Park, 1948, p. 64. 17 10 1 Dudley mine Type: Gold Location: Mecklenburg County,  $7\frac{1}{2}$  miles west of Charlotte. Reference: Pardee and Park, 1948, p. 63. 5-6 24

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Duffie mine
 1
      Type: Gold
2
      Location: Gaston County, 6 miles northeast of Gastonia and 16
           miles west of Charlotte.
 5~
           Gold occurs with pyrite and chalcopyrite in a quartz vein 2 to
      10 feet wide. At a depth of 110 feet a large body of low-grade
7
      sulfide ore was found. The vein has been worked to a depth of 110
8
      feet.
 10-
      References: Bryson, 1936, p. 129;
11
                    Genth and Kerr, 1881, p. 102;
12
                    Kerr and Hanna, 1888, p. 303-304;
13
14
                    Nitze and Hanna, 1896, p. 148;
 15-
                    Nitze and Wilkens, 1897, p. 66;
16
                    Pardee and Park, 1948, p. 62.
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## Duke (Tingen) mine

Type: Copper

Location: Person County, the southernmost mine of the Virgilina district, about 15 miles southwest of Virgilina.

At least two copper-bearing quartz veins which generally follow the schistosity of the epidotized greenstone schist country rock were discovered. They carried bornite, chalcocite, malachite, azurite, with a little cuprite and chalcopyrite in a gangue of quartz, epidote, calcite, chlorite, and hematite. During the late 1890's these veins were explored by the Hicks shaft, about 280 feet deep, with drifts at the 100-foot and 267-foot levels, and the No. 3 shaft, 225 feet deep with a level at 100 feet. In 1917 the property belonged to Mr. Brodie Duke, of Durham, N.C.

Reference: Laney, 1917, p. 140-141.

#### Dulin mine

Type: Gold

Location: Union County,  $3\frac{1}{2}$  miles northeast of Indian Trail.

Reference: Pardee and Park, 1948, p. 65.

## Dunlop (Mole Hill) mine

Type: Gold

Location: Mecklenburg County, 8 miles northwest of Charlotte. -

Reference: Pardee and Park, 1948, p. 63.

Dunn mine 1 Type: Gold 2 Location: Mecklenburg County, 9 miles northwest of Charlotte, 2 3 miles northwest of the Alexander mine, toward Rozzel's Ferry, on the west side of Long Creek. -5--6 Quartz veins carrying pyrite and auriferous chalcopyrite occur 7 in rocks of the slate belt. Above a depth of 20 feet the ore was The mine was noted for beautiful scales and plates of specular iron imbedded in masses of limonite. The Dunn mine was the 10first mine discovered in Mecklenburg County, not long after the 11 finding of gold nuggets at the Reed mine in Cabarrus County in 1799. 12 The ore body was mined to a depth of 20 feet through the East vein 13 and the Main vein. The underground work consisted of a 60-foot and 14 a 90-foot shaft connected at the 60-foot level and cutting 3 or 4, parallel 15ore bodies. In the 1880's a 10-stamp mill was operated at the mine. 16 In the early years of its history the ore in the East vein was too 17 refractory to be treated by the methods then in use, and was considered 18 to be "no account" as a gold mine, although it was rich in copper. 19 20--Bryson, 1936, p. 123-124; Emmons, 1856, p. 177; References: 21 Emmons, 1861, p. 31; 22 Kerr and Hanna, 1888, p. 210; 298-300; 23 Nitze and Hanna, 1896, p. 140-141; 24 Pardee and Park, 1948, p. 63. 25

1 Dunns Mt. mine Type: Gold Location: Rowan County, 3-1/2 miles east of Salisbury, 1-1/2 miles north of Granite Quarry, and 1/3 mile northwest of Dunns Mountain. 5 Dark gray pyrite-impregnated dioritic rock and pink gneissoid 7 granite were seen on the dump. The country rock is gneissoid granite, cut by a diorite dike. Three quartz veins are heavily impregnated with pyrite and chalcopyrite. There were two shafts, one 190 feet deep, and the other, the Office vein, about 140 feet deep. 11 12 References: Brown, C. B., 1934, written communcation; 13 Genth and Kerr, 1881, p. 116; Kerr and Hanna, 1888, p. 281; 15-Nitze and Hanna, 1896, p. 117-118. 16 1 Dunn, W.L., mine Type: GoldLocation: Mecklenburg County, 7 miles west of north of Charlotte. 5--A quartz vein 6 to 8 inches wide carrying limonite and manganese stamis is in sheared granite country rock. The vein was mined in 1933 by the Stark Gold Mining Corp. The dump contained 3 to 4 tons of ore said to assay \$15 per ton. 9 10-Bryson, 1937, p. 16, 27; References: 11 J.T. Pardee, 1934, written communication;

Pardee and Park, 1948, p. 63.

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Durgy (Person Consolidated, Yancey) mine

Type: Copper

Iocation: Person County,  $7\frac{1}{2}$  miles southwest of Virgilina. The mine can be reached by taking the paved road northeast from Allensville crossroads for 0.3 mile. Turn north on a secondary road for approximately 1 mile. The mine lies west of the road at this point, between the road and Maho Creek.

Four or more veins, including the Durgy, Cross Cut, and Main veins, outcrop in tu faceous Virgilina greenstone and have been traced by surface debris for nearly one mile. The main vein, on which the only work of importance has been done, is 6 to 18 feet wide; in it the ore occurs in definite ore shoots, but the vein is never barren. The ore minerals are bornite, chalcoyite, malachite, azurite, cuprite, argentite (?), chalcopyrite, Klaprothite, and gold, in a gangue of quartz, epidote, chlorite, calcite, and hematite. In the ore silver occurs in the proportion of 0.8 to 1 ounce to 2 percent of copper and is intimately associated with the copperbearing minerals.

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Copper was discovered by Theron Yancey and was mined by him in 1892, when the mine was known as the Yancey mine. In 1899 or 1900 it was purchased by the Person Consolidated Copper and Gold Mines Company and was operated until 1908. This company built a 100-ton concentrating plant which was not successful. In 1910 and 1911 the Tennessee Copper Company operated the mine. It was opened again in 1916 or 1917. mine was more extensively developed underground than any other mine in the Virgilina district, with 2 shafts, 410 feet and 160 feet deep, and more than 4,000 feet of drifts. In 1942 the mine was owned by the Virginia Rock and Minerals Company. In 1942 and 1943 the U.S. Bureau of Mines reopened the shaft and conducted a program of bulldozer trenching, diamond drilling, and geophysical surveying of the mine. 1953 and 1954, Nipissing Mines, Ltd., carried out an exploration program for copper ore at this and other mines in the Virgilina district. A large tonnage of 2 percent copper ore in veins less than 4 feet wide was indicated by exploratory drilling. The ore indicated was not considered commercial and no attempt was made to mine it. The production of the Durgy mine has been approximately 70,000 tons of 2 percent copper ore. References: Conley, 1958, p. 62; Kerr and Hanna, 1888, p. 219-221; Laney, 1917, p. 130-139; Newberry and others, 1948, p. 8-10; Stuckey, 1965, p. 289; Weed, 1900, p. 461-463; 1911, p. 81-82.

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Durgy prospects
1
     Type: Gold
2
     Location: Person County, 4 miles southwest of Virgilina.
3
           A gold prospect is shown on Laney's map.
 5-
6
     Reference: Laney, 1917, map.
7
8
      Durham mine
      Type: Gold
2
      Location: Cleveland County, 1-1/4 miles south of Stepps Gap.
      Reference: Keith and Sterrett, 1931, p. 9.
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Dutch Creek Mines 1 2 Gold Type: 3 Rowan County, 10 miles southeast of Salisbury, and Location: just east of Dutch Second Creek. 5-The property contains a network of some 20 quartz 7 veins, among which the more prominent are the Katie, Hill, Tip-top, and Spring. The veins carry gold, pyrite, chalcopyrite, and sederite in a quartz gangue 10in siliceous granite country rock, which is sheared 11 and converted to quartz-sericite schist near the 12 veins. Above water level the ores were oxidized, the 13 underlying primary sulfide ores were refractory and 14 had a gold content of \$10.00 per ton and upward. 15-The prospects belonged to Mr. A. H. Graf of Salisbury. 16 They were worked between 1883 and 1895. In about 1907 one old shaft was reopened by Mr. Gray. The 17 18 operations were confined largely to oxidized ore: 19 References: Kerr and Hanna, 1888, p. 283; 20-Laney, 1910, p. 113-114; 21 Nitze and Hanna, 1896, p. 120; 22 Nitze and Wilkens, 1897, p. 60; 23 Pardee and Park, 1948, p. 92. 24 25

```
Dutchman's Creek mine
     Type: Gold
2
     Location: Montgomery County, on the west flank of the Uharie
3
          Mountains, along Dutchman's Creek, about Imile east & The
          Pre Dee River.
 5 ~
          This was a placer mine in gravel underlying saprolite. Mining
     was hindered by the scarcity of water and the tenacious nature of
7
     the saprolite.
8
     References: Bryson, 1936, p. 78;
 10-
                   Conley, 1962, p. 18; map;
11
                   Kerr and Hanna, 1888, p. 248;
12
                   Nitze and Hanna, 1896, p. 80;
13
                   Nitze and Wilkens, 1897, p. 52;
14
                   Pardee and Park, 1948, p. 63.
 15-
16
17
      Dutton mine
 1
            See Morris Mountain mine, Montgomery County
3
21
22
23
24
 25
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Reference: Conley, 1958, p. 60.

```
1
     East Hill mine
     Type: Gold
2
     Location: Union County, about 4\frac{1}{2} miles southwest of Indian Trail and
3
          northeast of the Lewis mine, in the Moore Hill group of mines.
 5-
          The ores are described under the Moore Hill mine.
6
     quartz schist is cut by poorly mineralized bull quartz seams. A deep,
7
     narrow open cut is near the north end of East Hill.
8
9
     References: Brown, C. B., 1934, written communication;
 10-
                   Nitze and Hanna, 1896, p. 103;
11
                  Pardee and Park, 1948, p. 101-102.
12
     Eddleman (Berry, Holland) mine
1
      Type: Gold
2
     Location: Gaston County, 4\frac{1}{2} miles southeast of Gastonia.
3
     Reference: Pardee and Park, 1948, p. 62.
19
     Eldorado mine
1
     Type: Copper, zinc
2
     Location: Montgomery County, 1 1/2 miles south of the Coggins mine
3
           and east of the village of Eldorado.
 5 --
          The minerals azurite, malachite, hydrozincite, and sphalegite
     were noted.
7
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Elise (Elsie) mine
1
      Type: Gold
2
      Location: Moore County, near Hemp.
3
      References: Brywon, 1930, p. 18;
 5 --
                    Pardee and Park, 1948, p. 64.
6
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Elk Knob mine

with the other three.

Type: Copper

Location: Watanga County, on the north side of Elk Knob, above 1,500 feet below the summit, and on the west side of Elk Knob Branch.

Another opening on the south side of Elk Knob at 4,000 feet in the bed of a stream tributary to Meat Camp Creek was also noted. A prospect in a direct line with these at the southern base of Elk Knob may be the Miller mine, and an unnamed prospect a little farther south, with a 100-foot tunnel, is also in a direct line

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The deposits occur in a shear zone 5 to 6 feet wide in hornblende gneiss country rock of the Roan Formation. The ore consists of hard altered greenstone interlayered with pyrite, pyrrhotite, chalcopyrite, and a small amount of sphalerite. Gangue minerals are mainly hornblende, anthophyllite, and actinolite.

The mine was opened about 1875 by Bock and Zegn of Milwaukee, Wis.

who worked the deposit for 4 or 5 years and shipped several carloads

were drilled by Wills (Wells) and Nave of the Carolina Copper Corp.,

of high grade copper ore carrying some gold. At that time the workings

consisted of 4 shafts, 45, 20, 24, and 175 feet deep, and 3 drifts, 100

140, and 50 feet long. In 1939 the workings were cleaned out and 8 holes

Mountain City, Tenn. They worked the mine for about 6 months and shipped

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one carload of ore which carried about 1.5 percent copper. The property was owned by Virginia Rock and Minerals Corp. in 1942.

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G. H. Espenshade, 1943, written communication;
1
                   Keith, 1903, p. 8;
2
                   Kerr and Hanna, 1888, p. 224;
                   Ross, 1935, p. 87;
                   Stuckey, 1965, p.285 - 286;
Tennessee Valley Authority, 1942, written communication;
 5-
                   Weed, 1911, p. 134-136.
7
       Ellington (Blair, Hard Hill) mine
1
2
       Type: Gold
       Location: Mecklenburg County, east of Mungo's store, 11 miles south
            of east of Charlotte. The middle portion of the vein is known
            ar the Blair, and the southwestern portion as the Hard Hill vein
  5--
            One of a group of quartz veins (northeast-southwest trending)
8
       References: Nitze and Hanna, 1896, p. 144; Pardee
9
                  S and Park, 1948, p. 63.
 10-
18
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Elliotte Brothers prospects.
1
      Type: Gold
2
      Location: Mecklenburg County, 5 miles south of Charlotte.
3
 5-
           Auriferous chalcopyrite [has been] found in several veins on the
      farm of the Elliotte brothers. Five of the veins are grouped in a
7
8
      space of \frac{1}{2} mile, and they range from 3 to 6 feet in thickness and
      carry quartz, brown ore, and sulfides.
 10~
      References: Kerr and Hanna, 1888, p. 303;
11
                    Nitze and Hanna, 1896, p. 145.
12
     Ellsworth mine
     Type: Gold
2
     Location: Cabarrus County, 1\frac{1}{2} miles north of Georgeville, and
          continuous with the Crosby No. 2 mine.
  5-
          Gold occurs in quartz vein. The vein was worked after the Civil
6
     War by the Cabarrus Mining and Milling Co. Numerous prospect pits
7
     and trenches were seen in 1934.
    References: C. B. Brown, 1934, written communication;
                  Pardee and Park, 1948, p. 62.
11
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```
Ellwood (Elwood) mine
1
2
     Type: Gold
     Location: Rutherford County, 3 miles N. 20°E. from Rutherfordton and
3
          1\frac{1}{2} miles southwest from the Alta mine, on the waters of Cathey
 5-
          Creek.
          Five parallel quartz veins, 10 to 15 inches thick and carrying
7
     gold, pyrite, and chalcopyrite occur in gneissic country rock. The
8
     ore ray from $5 to $7 per ton, and $20 per ton for sulfide-bearing
9
     ore. The mine was opened in 1842 and was last operated in 1983.
 10-
11
     References: Bryson, 1936, p. 142;
12
13
                  Nitze and Hanna, 1896, p. 170.
14
 15-
     Elwood mine
     See Orchard mine, Cabarrus County.
 2
3
 1
      Elwood mine
 2
      See Hunter, John P., mine, Mecklenburg County.
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Emmons (Davidson, Hercules) mine

Type: Copper, gold

Location: Davidson County, 15 miles southeast of Lexington and

1 mile south of the Cid mine.

Chalcopyrite with galena, sphalerite, and auriferous pyrite occurs in quartz gangue or in narrow stringers in chloritic schistase slate country rock of the volcanic series. Other gangue minerals are siderite, chlorite, calcite, and ankerite. Chlorite tends to accompany barren quartz. The mine was discovered before 1861 but was closed during the Civil War. After the war the mine was reopened and worked for several years by a Baltimore company which successfully treated the ore by the Hunt and Douglas process. The mine was worked again in 1885-86 and 1902-04, and the workings consisted of two shafts, the deeper of which was 416 feet deep on the incline with levels at 200, 280, 350, and 410 feet. The ore is said to have assayed 3+4% copper. In 1934 it was estimated that there was 6,400 tons of ore on the dumps containing about 150 tons of mineralized rock. The production of the mine is said to have been over \$100,000, chiefly in copper, with some gold and silver.

References: C. B. Brown, 1934, written communication;

Kerr and Hanna, 1888, p. 213;
Nitze and Hanna, 1896, p. 60;
Parde e and Park, 1948, p. 73;
Pogue, 1910, p. 115-117;

Huckey, 1965, p. 292 - 293.

```
1
      Empire mine
2
      Type: Gold
      Location: Mecklenburg County, 6 miles east of Charlotte.
3
      Reference: Pardee and Park, 1948, p. 63.
 5-
6
      Empire mine
1
            See Delft mine, Randolph County -
2
 10-
     England mine
 1
     Type: Gold
 2
     Location: Catawba County, east of Newton,
3
 4
          The mine was worked in 1895.
  5-
     Reference: Nitze and Hanna, 1896, p. 150.
 7
18
      Engle prospect
 1
      Type: Copper
      Location: Person County, one mile northeast of the Gillis mine.
 3
            Copper-stained quartz, chalcocite, and bornite occur in a well-
  5 --
      defined, narrow quartz vein in Virgilina Greenstone. Shallow pits and
      shafts did not develop anything of commercial value.
 7
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Reference : Laney, 1917, p. 156.

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Eudy mine
      Type: Gold
      Location: Guilford County, near Jamestown;
 3
                   Nitze and Hanna, 1896, p. 116;
      References:
  5-
                   Pardee and Park, 1948, p. 62.
 6
 7
     Eudy mine
 1
     Type: Gold
2
     Location: Stanly County, 8 miles west of Albermarle, 12 mile north-
3
     east of Lambert, and ½ mile west of Big Bear Creek.
 5 --
          Two small quartz veins in slate carried gold but no sulfide
     minerals. The mine was worked in a small way, about 1895 to 1905.
7
     In 1932 some prospecting was done by Sidney Vaughn and K. W. Uhe.
8
     The workings included shallow pits and cuts and shafts 30 and 35 feet
     deep.
 10-
11
                  C. B. Brown, 1934, written communication;
     References:
12
                  Pardee and Park, 1948, p. 97.
13
21
22
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Eureka mine 1 Type: Gold 2 Location: Davidson County, 1/2 mile west of the Lalor mine. 3 This mine is similar to the Lalor mine; the ore carried gold and 5 silver. The mine was penetrated to a depth of 125 feet. 6 7 References: Kerr and Hanna, 1888, p. 279; 8 Nitze and Hanna, 1896, p. 117. Eury (Wade) mine 1 Type: Gold 2 Location: Montgomery County, 4 miles north of Troy. 3 Gold was confined to a 2-inch streak on the hanging wall side 5of a 2-foot-wide quartz vein in siliceous slate. During the years 1929 to 1936 a 40-foot shaft was sunk at this mine. 7 8 Reference: Bryson, 1937, p. 24. 9 20-Eustis property see Cornfield property, Granville County 23 Everett mine

see Hazel Creek mine, Swain County.

```
1
      Faggart mine
2
      Type: Gold
3
      Location: Cabarrus County, 3 miles northeast of the Phoenix mine and
           5 miles southeast of Concord. On the same mining track as the
           Snyder mine. ____
           Pyrite and specular hematite were seen in 1934 in an 18 inch wide
7
      auriferous quartz fissure vein in pink granite country rock. The
8
      mine was opened by a shaft 100 feet deep with a 50-foot drift. In 1936
      the shaft was cleaned out, and some frift work was done; and any ore
 10-
      produced was to have been milled at a stamp mill erected at the
11
12
      Snyder mine.
13
      References: C. B. Brown, 1934, written communication;
14
                   Bryson, 1937, p. 17;
 15-
                   Nitze and Hanna, 1896, p. 123;
16
                   Nitze and Wilkens, 1897, p. 62;
                   Pardee and Park, 1948, p. 62.
18
19
 20-
    Fag Hill mine
    See Fox Hill mine, Union County.
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Faires mine
  1
      Type: Tin
  2
      Location: Cleveland County, 1/4 mile southwest of the Falls prospect,
           about 1 mile southwest of the town of Kings Mountain.
   5-
           Cassiterite-bearing pegmatite dikes occur in hornblende schist
  6
      country rocks. Cassiterite is present in both greisen gangue and
  7
      feldspathic gangue. The Carolinas Tin and Development Company worked
      the property in 1904, at which time there were a 40-foot shaft with
      200 feet of drifts and crosscuts, and numerous pits. In 1941-1942
  10-
      the Atlas Collapsible Tube Company, of Chicago, drilled 2 holes and
 11
      sank 2 shafts, one 30 feet deep 125 feet northeast of the main shaft,
 12
      and one 125-feet deep 200-feet northwest of the main shaft. Samples
13
      of cassiterite-bearing greisen taken from the latter shaft, called
 14
      the Atlas shaft, averaged less than 0.03 percent of metallic tin.
      Float ore was seen 435 feet northeast and 1,825 feet southwest of the
 16
      main shaft.
 17
 18
     References: Graton, 1906, p. 48-49;
 19
                   Keith and Sterrett, 1917, p. 139;
  20-
                  Kesler, 1942, p. 264-266; table 18;
 21
                 Pratt and Sterrett, 1904, p. 26;
 22
                   Stuckey, 1965 p. 335.
 23
 24
  25.
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1 Faires mine 2 see Ferris mine, Mecklenburg County ~ 3 Fairfield Valley (Georgetown) placers 1 Type: Gold 2 Location: Jackson County, on the southern slopes of the Blue Ridge, 3 near Hogback and Chimney Top Mountains. The gold-bearing zone extends through Casher's Valley and in Fairfield Valley along 5-Georgetown Creek, a tributary of the Toxaway River. 6 The location of Fairfield Valley is given by 7 Bryson as Transylvania County. 9 Placer gold deposits extend for several miles along the streams. 10-The source of the gold is veins in the mountains rising above the 11 valleys. A spring on Hogback Mountain is said to have produced daily 12 deposits of gold in sands over which the spring water ran. Jackson 13 14 County placers yielded between \$200,000 and \$300,000 before 1880. 15--References: Bryson, 1936, p. 148; 16 Kerr and Hanna, 1888, p. 317; 17 18 Nitze and Hanna, 1896, p. 191-192; Smith, 1875, p. 118-119. 19

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Falls prospect
1
           Tin
    Type:
    Location: Cleveland County, south of the town of Kings Mountain.
3
         Cassiterite-bearing greisen occurs in a pegmatite dike enclosed
 5-
     in muscovite schist and gneiss. A number of shafts were sunk and
     trenches were cut on the property of Mrs. Lizzie Falls before 1904.
7
8
    References: Keith and Sterrett, 1917, p. 138-139;
                  Kesler, 1942, table 18;
 10-
                  Pratt and Sterrett, 1904, p. 26.
11
12
      Farrar mine
 1
      Type: Gold
2
      Location: Gaston County, \frac{1}{2} mile west of the Oliver mine, or about
3
           1/4 mile east of Mountain Island.
 5-
      References: Nitze and Hanna, 1896, p. 149;
6
                   Pardee and Park, 1948, p. 62.
 20-
                   J.B.,
     J. B. Fawcett mine
 1
      Type: Barite
 2
      Location: Orange county, 4.1 miles south of Hillsboro on N.C.
 3
           Highway 86, and 1.4 miles west on a gravel road. (
 4
  5 -
      Reference: Conley, 1958, p. 61.
```

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Fentress mine
 1
           See North Carolina mine, Guilford County
 2
 3
      Ferguson mine
 1
      Type: Gold
 2
      Location: Gaston County,
 3
           Quartz veins carry pyrite, gold, and magnetite. The property
  5-
      was purchased by Mr. W. M. Fulton of Knoxville, Tenn., in about 1934.
 6
 7
      References: Bryson, 1937, p. 16;
 8
                    Genth and Kerr, 1881, p. 103;
, 9
14
 15--
       Ferguson Hill mine
 1
 2
       Type: Gold
       Location: Mecklenburg County, 11 miles south of east of Charlotte,
 3
            about ½ mile southwest of Mungo's store.
  5-
            Gold occurs in one of a series of northwest-southeast trending
       veins.
       References: Nitze and Hanna, 1896, p. 144;
                    Pardee and Park, 1948, p. 63.
 10-
```

Ferris (Faires, Garris) mine 1 2 Type: Gold Location: Mecklenburg County,  $\frac{1}{2}$  to 6 miles northeast of Charlotte; 3 the southernmost vein, the Garris, is on the McCombs place, about  $\frac{1}{2}$  mile N. 15°E, from the McCombs mine. 5~ 6 Three quartz veins in a sheared granite zone have been worked, 7 the "North" vein, the "South" vein, 300- to 400 feet southwest of the "North" vein, and the Garris vein farther south, believed to 10represent the union of the other two. The veins are composed of 11 milky quartz carrying gold, pyrite, and chalcopyrite in micaceous 12 schist country rock. The ores are oxidized to a depth of 90 feet. 13 The North vein has been worked most extensively, but in 1894 the Garris vein was being worked by two shafts, 90 and 120 feet deep. 15-The quartz contained nearly 25 percent sulfides and the concentrates 16 assayed \$45 to \$60 per ton. The ores were treated in a Chilean 17 mill of 3 tons capacity. In 1934, two groups of workings several 18 hundred feet apart were seen. 19 References: Bryson, 1936, p. 124-125; 20-21 Genth and Kerr, 1881, p. 111; 22 Kerr and Hanna, 1888, p. 300-301; J.V. Iewis, 1934, written communication; 23 24 Nitze and Hanna, 1896, p. 142-143; Nitze and Wilkens, 1897, p. 66,
Pardee and Park, 1948, p. 63

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Ferris, Tom, mine
1
      Type: Gold
2
      Location: Mecklenburg County, 1 mile west of Shopton.
3
      Reference: Pardee and Park, 1948, p. 63.
     Fesperman mine
1
     Type: Gold
2
    Location: Stanly County, 4 miles east of Albemarle.
3
          This was a placer mine.
 5--
6
    Reference: Pardee and Park, 1948, p. 65.
13
     Fines Creek mine
1
      see Redman mine, Haywood County
2
٠3
      Fisher mine
1
      Type: Gold
2
      Location: Cabarrus County, near Concord,
3
          Gold, pyrite, and chalcopyrite were noted in the ore.
     Reference: Genth and Kerr, 1881, p. 96.
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U. S. GOVERNMENT ....

Fisher Hill mine

Type: Gold

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Location: Guilford County, 5 to 6 miles southwest of Greensboro, and 2 miles west of the Hodges Hill mine. Fisher Hill is the most northerly of 3 mines on one 900 acre tract. To the south are the Millis (Willis), Hill and Puckett mines. -

The 3 mines are on two systems of flat-lying quartz veins, one running north-south, and the other nearly northeast-southwest, in granite country rock. The north-south veins were most extensively worked, one was traced for nearly a mile, and contained ore bodies 4 inches to 10 feet thick. The veins carried gold, white pyrite, chalcopyrite, magnetite, hematite, ilmenite, limonite, pseudomalachite and siderite. The quantity of copper in the ore increased to the The Fisher Hill mine contained little chalcopyrite, the Millis south. Hill a somewhat larger quantity, and the Puckett a considerable amount, with much pyrite. Emmons in 1856 described the ore as appearing poor, but it proved to average \$3.00 in gold per bushel (100 lbs). The main vein was successfully operated at several points. In 1886 and 1887 four levels, aggregating nearly 200 feet, had been run from a 180-foot inclined shaft. The ore was milled in a 10-stamp In 1934 the remains of a Chilean mill and other equipment were seen.

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1
     References: Bryson, 1936, p. 105;
2
                   Conley, 1958, p. 34;
                   Emmons, 1856, p. 172-173;
                   Genth and Kerr, 1881, p. 109;
 5 -
                   Kerr and Hanna, 1888, p. 278-279;
                   Nitze and Hanna, 1896, p. 110-111;
7
                   Nitze and Wilkens, 1897, p. 45;
                   Pardee and Park, 1948, p. 75.
 10-
     Flemming (Fleming) mine
     Type: Gold
     Location: Caldwell County, near Lengor.
3
          In 1911 the mine was owned and developed by J. W. Fleming of Lenflor
  5-
     and was equipped with a stamp mill, boilers, pumps, etc.
 7
     References: Pardee and Park, 1948, p. 62;
 8
                  Pratt, 1944, p. 19.
 20-
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1
    Flint Knob mine
    Type: Gold, lead
2
    Location: Wilkes County, about 6 miles east of Deep Gap on a spur of
3
         the Blue Ridge known as Laurel Spur and Flint Knob.
 5-
6
         Quartz veins in garnetiferous gneiss and mica schist carry argentiferous
7
    galena, pyrite, and chalcopyrite. The ore is gold-bearing.
         When visited in 1894, the property had been only superficially
8
9
    explored.
 10-
11
    References:
                 Kerr and Hanna, 1888, p. 202;
                 Nitze and Hanna, 1896, p. 178-179.
12
13
14
      Flint Springs mine
      See also Freehold mine, Stanley County (504)
 2
      Location: Stanly County, 1 mile east of New London and 2 mile north-
 3
      east of the Parker mine.
 5-
           This was a placer and was much like the adjoining Parker mine.
6
      In 1887 it was incorporated with the Parker, Johnny Parker, and
      Biles mines and was operated as the Freehold mine by a London
      Company, the Stanley Freshold Gold Mines, Ltd., which had installed
9
      a large and admirable plant.
 10-
     References: Eng. and Mining Jour. 1887, v. 43, p. 444.
11
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Kerr and Hanna, 1888, p. 259;

Pardee and Park, 1948, p. 65.

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Flowe's mine
1
       Type: Gold
2
       Location: Cabarrus County,
3
            Wolframite, scheelite, and barite were noted in the ore.
 5-
6
      Reference: Genth and Kerr, 1881, p. 95.
7
9
     Folger Hill mine
 1
     Type: Gold
     Location: Union County, about \frac{1}{2} mile northwest of the Davis mine,
           and in the Moore Hill group of mines.
 5 --
6
           The ores are described under the Moore Hill mine. In the 1880's
7
     the mine was worked for a length of 300 to 400 feet, and to a depth
     of 90 feet.
9
     References: Brown, C. B., 1934, written communication;
 10-
11
                   Bryson, 1936, p. 95-96;
                   Kerr and Hanna, 1888, p. 263;
12
13
                   Nitze and Hanna, 1896, p. 100-102;
14
                   Pardee and Park, 1948, p. 101-102.
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Fontana mine

Type: Copper

Location: Swain County, along Eagle Creek about  $2\frac{1}{2}$  miles north of Fontana Village, in an area now inaccessible by road, as the water level of the Fontana reservoir lies about 100 feet vertically below level 1 of the mine.

The Fontana deposit is a single elongated lens following the foliation of the feldspathic sandstone and phyllite wallrocks. The ore minerals are pyrrhotite and chalcopyrite with smaller amounts of sphalerite, magnetite, and galena. The proportion of chalcopyrite and sphalerite increases and pyrrhotite decreases with depth; ore in the upper levels of the mine is characteristically massive sulfide, and ore from the lower levels is more schistose. Gangue minerals are talc, chlorite, quartz, plagioclase, and ankerite. The deposit was capped at the surface by 5 feet of heavy gossaw overlying several feet of sufergene chalcocite, native copper, cuprite, covellite, pyrite, and malac hite. The average grade gall ore shipped from 1931 to 1942 was 7.37 percent copper, 2.11 percent zinc, 0.0072 ounce gold per ton, and 0.385 ounce silver per ton. The podlike shape of the deposit suggests that the ore body is in a pipelike zone of deformation formed by structures cutting across the foliation of the country rocks.

The Montvale Lumber Company prospected the ore body and shipped 2,000 tons of ore before selling the mine to the Fontana Mining Corp. in 1926. This company operated the mine until 1931, when it was sold

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25

to the North Carolina Exploration Co., which continued operation until 1 1944, when the rising waters of the Fontana reservoir forced the mine 3 to close. The deposit was opened by several adits and an inclined shaft from which 18 levels were driven, the deepest, at a vertical depth of more than 1,700 feet. The mine produced more than 83 million pounds of copper. 7 Reference : Espenshade, 1963, p. 23-30; 8 Kendall, 1953, p. 112-123; 9 Laney, 1907, p. 72-79; 10-Stuckey, 1965, p. 284 - 285, 11 12 13 Ford mine 1 Type: Gold 2 Location: Union County, 5 miles northeast of Indian Trail. 3 Gold with sulfides occurs in a quartz vein in tuff be breccia 5country rock. A shaft and pits were put down before the Civil War, and a 23-foot shaft was put down in 1933. 7 References: C. B. Brown, 1934, written communication; Pardee and Park, 1948, p. 65. 10-

Ford prospect 1 Type: Copper 2 Location: Granville County, 6 miles south of Virgilina. A prospect shown on Laney's map. 5-Reference: Laney, 1917, map. 7 Fourth of July mine 1 Type: Copper 2 Granville Location: Person County, 2 miles south of Virgilina and 1/4 mile 3 northeast of the Annie Maud prospect. 4 5-The dump contained greenstone schist and copper-stained quartz, but no signs of a vein. A prospect shaft had been put down. 7 8 Reference: Laney, 1917, p. 158. 17 Foust mine 1 Type: Copper 2 Location: Alamance County, at the south foot of Bass Mountain. 3 Copper and galena are found in a bluish-green chlorite vein which has been worked to a depth of 78 feet. 6 7 Reference: Kerr and Hanna, 1888, p. 214.

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Fox Hill (Fog Hill) mine
1
      Type: Gold
2
      Location: Union County, 3\frac{1}{2} miles northeast of Indian Trail; about
           1 mile northeast of the Henry Phifer mine; and 3/4 mile north-
 5-
           east of the north fork of Crooked Creek.
7
           A quartz vein carrying oxidized iron ore, pyrite, and gold, is
      in sericite schist derived from the of the volcanic series.
8
      and shafts are scattered along a northeasterly course for a distance
 10-
      of 1,500 feet. Some work was done in 1933.
11
12
      References: Brown, C. B., 1934, written communication;
13
                   Bryson, 1936, p. 93;
14
                   Nitze and Hanna, 1896, p. 99;
 15-
                   Pardee and Park, 1948, p. 103.
16
1
    Francis mine
2
     Type: Gold
3
    Location: Caldwell County, near the Baker mine, on the John's River.
 5-
    References: Nitze and Hanna, 1896, p. 177;
                  Pardee and Park, 1948, p. 62.
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U. S. COVERNING

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Frazer mine
1
     Type: Gold
     Location: Mecklenburg County, about 6 miles northwest of Charlotte
3
          and 1 mile Northeast of the Todd mine.
 5-
           Gold and pyrite were noted. A shaft was sunk to a depth of
6
     about 100 feet on a vein 1 to 3 feet wide.
7
     References: Genth and Kerr, 1881, p. 111;
9
                   Kerr and Hanna, 1888, p. 293;
 10-
                   Pardee and Park, 1948, p. 63.
11
12
       Frazier mine
 1
       Type: Copper
 3
       Location: Granville County.
            The Frazier mine is like the "Native Shaft" at the Cornfield
       property. It shows no defined vein, but quartz stringers and streaks
  5 --
       of bornite occur in cracks and fissure seams in massive epidote
       rock.
 7
 8
       Reference: Weed, 1900, p. 463.
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U.S. GOVERNME" " "

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1
     Frederick mine
2
     Type: Gold
     Location: Mecklenburg County, 7 miles southeast of Charlotte, and
     possibly the same as the Tredinick mine
 5 -
        Gold, pyrite, chalcopyrite, chrysocolla, and malachite were found
     here.
     References: Genth and Kerr, 1881, p. 111;
 10-
                   Pardee and Park, 1948, p. 63.
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## Biles, Flint Springs Parker and Parker, Johnne Freehold, mine Type: Gold Location: Stanley County, from near Salisbury to near New London. Between 1887 and 1896 the Stanley Freehold Gold Mines, Ltd., a London company, operated the Parker, Flint Springs, Biles, and Johnny Parker mines as the Freehold Fold Mines. They worked the placers and later did development work on some of the quartz veins. The company installed a pipeline 4½ miles long to obtain water from the Madkin River for hydraulic placer mining. Several large cuts were sluiced out and the value of the gravel worked is said to have ranged from 0.022 to 0.12 ounce, per cubic yard. The company made an corrying greatz veins unsuccessful attempt to work the unmodified saprolite, as distinguished from that which had been more or less concentrated by natural forces into placers. This material contained 0.025 ounce per ton of gold, half of which was lost because of extreme fineness. In 1895 and 1896 two shafts were sunk to explore quartz veins. At a depth of 130 feet a quartz vein carrying iron and copper . sulfides was opened in the Ross shalf. At the end of 1896 the property was reported to be in liquidation. References: Engineering and Mining Journal, 1887, v. 43, p. 444; 1890, v. 49, p. 714; 1890, v. 50, p. 278; 1891, v. 52, p. 369, 513, 686; 1892, v. 53, p. 530; 1895, v. 59, p. 422, 590; 1896, v. 61, p. 190, 287; 1896, v. 62, p. 326, 615; 1899, v. 67, p. 125;

1899, v. 68, p. 498; 1902, v. 74, p. 764;

Pardee and Park, 1948, p. 93-94

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1
      Fritz-Honeycutt mine
      Type. Gold, silver.
Cohamma County.
 2
      Location: Cabarrus county, several hundred yards S. 33° W. from the
 3
                                    One of the Whitney group of muies.
            Mauney mine.
  5-
            The mine was worked to a small extent in the 1890's.
 7
      Reference: Nitze and Hanna, 1896, p. 91.
 8
 9
     Fulwood mine
  1
      See Smart mine, Union County (
 2
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U. S. GOVERNMENT "

Furness (Furniss, Firness) mine 1 Type: Gold 2 Location: Cabarrus County, 6 miles southeast of concord, and adjoins the 3 phoenix mine on the northeast. The mine is located on the left fork of a woods-farm road which enters a paved road 2.9 miles from 5 its eastward intersection with U. S. Highway 601, 0. 6 miles past its intersection with N. C. Highway 49. 7 Quartz veins along sheat zones in diorite contain pyrite, chalcopyrite, 9 hematite, free gold, scheelite, malachite, barite, siderite, and epidote. The mine was operated by Adolph Thies in the 1880's, and by the Miami 11 Mining Company in the period 1900-1906. During this time a shaft 176 12 feet deep with drifts at 90, 100, and 170 feet was put down. P. L. 13 Furr sank a 60 foot shaft in 1931, which is said to have opened a 14 3-foot quartz vein containing 5% sulfides. The mine was explored in 15-1958 by the Carolina Tungsten Company. 16 17 References: Conley, 1958, p. 18; 18 Nitze and Hanna, 1896, p. 123; 19 Pardee and Park, 1948, p. 71. 20 21 22 23 24

1 Furniss Furr mine Type: Gold 2 Location: Cabarrus County, 3 miles northwest of Georgeville,  $\frac{1}{2}$  mile 3 southwest of the Barrier mine, near the northeast bank of Rocky River. 5-Two quartz veins carrying gold cut greenstone schist. hanging-wall quartz, which is a foot or more thick, is flinty in 7 character and includes abundant pyrite. On the foot wall there is about a foot of quartz, part of it cellular and iron-stained, and associated with barite, and part of it enclosing bunches of pyrite. 10-The older workings at the mine include 2 or 3 shafts and several pits 11 and extend for 1,500 feet to the north. In 1934 the mine was operated, 12 and 15 tons of ore were treated by flotation at the White Star Mining 13 Co. plant at Smyrna, S. C. The mill heads assayed about 0.44 ounce 14 gold per ton, and the tailings assayed about 0.06 ounce gold per ton. 15-16 References: C. B. Brown, 1934, written communication; 17 Pardee and Park, 1948, p. 66-67. 18 19 20~ 21 22 23 24

U. S. GOVERNOUS

Furr, Allen, (Eva Furr, Silver Valley, Midas) mine 1 Type: Gold 2 Location: Cabarrus County, 1/2 mile south of Georgeville and 11 miles 3 southeast of Concord, near Rocky River. A tabular vein ranging from 6 inches to 5 feet or more in width 5 extends along a facilt fracture in moderately schistose beds of tuff of the volcanic series. The vein filling consists of quartz and sulfides, 7 chiefly pyrite, galena, and sphalerite. Samples of "run of Mines" ore taken in 1934 assayed 0.17 to 0.27 ounce of gold, 2 to 3 percent of lead, 3 to 5 percent of zinc, and 2 ounces of silver per ton. All the 10samples contained a little copper. 11 This mine was considered a promising source of lead in the 1880's 12 for large amounts of galena were occasionally found in the ore. 13 mine lay idle for many years. In 1934 and 1935 development work was 14 done by the Midas Mining Company of Winston-Salem, N. C. The shaft 15was sunk to a depth of 110 feet and 200 to 300 feet of drifting was 16 conpleted. In 1935 considerable ore was shipped to a flotation mill on 17 Rocky River. 18 19 References: Bryson, 1937, p. 16-17; 20-Kerr and Hanna, 1888, p. 191; 21 Nitze and Hanna, 1896, p. 93-94; 22 Pardee and Park, 1948, p. 65-66. 23 24 25

Gahagan mine 1 Type: Barite 2 Location: Madison County, 1/4 mile north of Walnut Gap and about 500 3 feet east of the Asheville-Knoxville highway. 5-Barite occurs in # steeply-dipping leness and fissizes enclosed 6 on both sides by Max Patch Granite of Archean age. The vein is about 2 7 feet thick and has been worked to a depth of 200 feet. Two varieties of ore occur in separate, but closely connected, lenses. One variety is sugary, white pure barite, and the other is pink, laminated barite containing 10finely disseminated fluorite. Other impurities in the ore are pyrite 11 and galena. The mine was worked in 1900 and again in 1925. The total 12 production was about 30,000 tons. .13 14 Reference: Hunter and Gildersleeve, 1946, p. 9-10. 15--16 Gamble mine Type: Gold 2 Location: Rutherford County, on the banks of the First Broad River, 3 south of Silver Creek Knob. 4 5-This was a placer mine. 6

U. S. GOVERNMENT ....

Reference: Kerr and Hanna, 1888, p. 312.

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Gannon mine
     Type: Gold
2
     Location: Capbarrus county,
     Reference: Pardee and Park, 1948, p. 63.
7
      Gap mine
1
      Type: Gold
2
      Location: Gaston County, 3 miles northeast of Stanley.
      Reference: Pardee and Park, 1948, p. 62.
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U. S. GOVERNMEN TO THE

Gap Creek (Copper Knob, Deep Gap) mine

Type: Copper, gold

Location: Ashe County, on the south fork of the New River, 0.4 mile northwest of the settlement of Gap Creek on the road to Idlewild, which is 4 miles northeast of Gap Creek.

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A quartz vein in a fault zone in hornblende gneiss of the Roam

Formation carried chalcocite, bornite, and free gold with very little chalcopyrite or pyrite. The vein was bordered by a selvage of iron oxide carrying free gold. In the oxidized zone the copper minerals were altered to malachite and chrysocolla. Native silver and "sulphuret of silver" were reported to have been seen in the ore.

The mine was opened before 1856 as a gold mine. In 1880, 40,000

14 pounds of copper ore was shipped. In 1885 the Copper Knob Mining

15— Company worked the mine and put down a shaft variously reported to be

140, 150, or 180 feet deep. During the 1880's the mine "became the

17 prey of a company of speculators, and was tossed about as a football,

18 on the floors of stock exchanges, and it suited the management to

19 conceal the real character of the lower levels". (Kerr and Hanna, 1888)

20— p. 225). In 1912'the Monation Mining Company shipped one carload of

21 ore that assayed \$20.00 in copper and \$8,00 in gold. In 1951 the Atoz

Corporation attempted unsuccessfully to reopen the mine.

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References: Bryson, 1936, p. 144-145;
 1
                   G. H. Espenshade, 1943, written communication;
 2
                   Kerr and Hanna, 1888, p. 188, 225-226;
                   Nitze and Hanna, 1896, p. 180-181;
                   K. H. Teague, 1951, written communication;
  5--
 6
                   Tennessee Valley Authority, 1942, written communication;
                   Weed, 1911, p. 132-133.
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U. S. GOVERNMENT

Gardner Hill Mine

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Type:

Gold, copper

Location:

Guilford County, 8 miles southwest of Greensboro, and 2 or 3 miles northeast of Jamestown. ——(

A quartz vein 6 inches to 3 feet wide in syenitic granite bounded by slate on either side, carries pyrite, chalcopyrite, and, above 110 feet, auriferous brown iron oxide. This ore carried about 1 ounce of gold per ton. The sulfide ore below the oxidized zone yielded as much as 30 percent copper. Other minerals found in the veins were native gold, bornite, chrysocolla, and malachite.. There were said to be 3 veins on the property, the Main, Worth, and Goshen veins. The mine was worked extensively long before 1861, and has been more or less idle since 1865, except that at times since 1880 parts of the dumps were milled. In 1856 Emmons estimated that the mine had produced \$100,000 from lode and placer workings. The vein was worked for a length of 5,000 feet and was opened by 6 shafts, from northeast to southwest, the Creek shaft, 110 feet deep, the Underlay shaft, 175 feet deep; the Old Engine shaft, 175 feet deep; the New Engine shaft, 258 feet deep; the No. 2 shaft, 110 feet deep; and the White Oak shaft, 150 feet deep. There were 4 levels at

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60, 100, 150, and 228 feet averaging about 500 feet in 1 length. In 1896 the mine was pretty well stored out 2 from the water level (60 feet) to the bottom of the respective shafts. It is stated that for "a long period" 40 tons of chalcopyrite ore averaging from 20 to 25 percent copper were shipped weekly. In the summer of 1934 the mine was unwatered under the direction of Haydn Gunter for the owner, J. E. Latham. A map showing workings accessible at that time, and shafts known as the Endy, Gardner, and Stafford shafts was published in 10-Pardee and Park (plate 23). Parts of the vein remaining 11 in 1934 were from 1 to 7 feet in width and consisted 12 chiefly of quartz with pyrite and chalcopyrite sparsely 13 scattered through it. 14 15-References: Bryson, 1936, p. 106-107; 16 Conley, 1958, p. 34; 17 Emmons, 1856, p. 174-176; 18 Genth and Kerr, 1881, p. 109; 19 Kerr and Hanna, 1888, p. 206; 20-Nitze and Hanna, 1896, p. 112-114; 21 Nitze and Wilkens, 1897, p. 46; 22 Pardee and Park, 1948, p. 75-76, pl. 23; stuckey, 1965, p. 450; Weed, 1960, p. 450. 24 25

1 Garland Prichard Mine 2 Type: Gold 3 Randolph County, Location: 5 -Surface material overlying rhyolite breccia country rock and carrying very fine gold was worked 7 for a total of about 3 months in 1909-1910. Reference: C. B. Brown, 1934, written communication. Garman (Gorman) mine 1 Type: Gold 2 Location: Cabarrus County, 1 3/4 miles south of Georgeville. 3 Reference: Pardee and Park, 1948, p. 62. Garris mine 1 2 See Ferris mine, Mecklenburg County. W. H., . 1 W. H. Garvey, prospect 2 Type: Copper Location: Ashe County, about 4 miles south of west Jefferson and 8 miles 3 4 southwest of Ore Knob, on the eastern end of Mulatto Mountain. 5-A vein of siliceous copper-bearing pyrite ore about ! foot thick 6 was exposed. The vein dipped nearly vertically and widened to 4 feet 7 8 at depth. Gossan was exposed at the surface. An analysis of the gossah 9 gave 1.77 percent metallic copper.

10-

Reference: Nitze, 1893, p. 164.

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T.E.
    J. E. Gates, Shaft
     Type: Tin
2
    Location: Lincoln County, southwest of the Henry shaft, of the Ka-Mi-
          Tin mine.
 5-
         Cassiterite was found in a well, in a nearby gully, and as float 250
6
    feet northwest of the well in muscovite schist or gneiss wall rock.
7
    Reference: Kestler, 1942, table 18.
 10-
      Georgetown placers
 1
      see Fairfield Valley placers, Jackson County
 2
13
14
 15--
      Gibb mine
      Type: Gold
      Location: Cabarrus County, adjoins the Phoenix mine on the west.
3
4
           The wall rock and veins are similar to those at the Phoenix mine.
 5--
      High-grade sulfide ore was mined in the 1880's.
7
      References: Nitze and Hanna, 1896, p. 123;
8
                   Pardee and Park, 1948, p. 62.
 25
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U. S. GOVERNIES

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Gibson mine
1
    Type: Gold
2
    Location: Guilford County, near Gibsonville.
3
           The mine was operated around 1930 by the Gibson Gold Mining
 5-
     Company.
7
    Reference: Bryson, 1937, p. 27.
8
 10-
     Gibson mine
1
      Type: Gold
                                                    (adjoining the Stephen)
      Location: Mecklenburg County, 9 miles west of Charlotte and Wilson
3
           mine.
4
 5--
      References: Nitze and Hanna, 1896, p. 132;
6
                   Pardee and Park, 1948, p. 63.
7
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Gillis mine
1
     Type: Copper
     Location: Person County, 5 miles southwest of Virgilina.
3
           A quartz vein carrying calcite, epidote, chlorite, and hematite
 5 --
     in Virgilina Greenstone, opened in 1852 or 1853, was examined by
6
     Ebeneyer Emmons in 1854, and was one of the earliest worked copper
7
     mines in the United States. The ore minerals are bornite, chalcocite,
     malachite, azurite, chrysocolla, tenorite(?), and cuprite. In 1856
     there were two shafts, the shouth shaft was 130 feet deep and the
 10-
     North shaft was 90 feet deep.
11
12
                  Emmons, 1856, p. 344-346;
     References:
13
                  Kerr and Hanna, 1888, p. 218-219;
14
                  Laney, 1917, p. 157;
 15-
                   Stuckey, 1965, p 287-288.
16
     Glen Alpine mine
1
     Type: Gold
2
     Location: Burke County, near the town of Glen Alpine.
3
          This was a placer mine in gravel.
 5--
     Reference: Kerr and Hanna, 188, p. 312.
7
20
       Glendale mine
            See Alta mine, Rutherford County
 1
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Glyyas mine 1 Type: Gold Location: Randolph County, 2 3 4 Gold was carried in small quartz stringers cutting andesitic and 5rhyolitic tuff. Old shafts were seen. Surface material was washed 6 in 1913-1915. 7 8 Reference: C. B. Brown, 1934, written communication. 9 1 Golconda mine 2 Type: Gold Location: Montgomery County, 1/2 mile northeast of the Iola mine, 3 and adjoining the Montgomery mine on the north. -5-6 Quartz veins carrying gold and pyrite occur in a mashed andesitic 7 tuff country rock. The rocks on the footwall side appeared to be 8 mineralized for about 50 feet from the vein. Between 1904 and 1906 the mine was operated by the Carolina Mining Company. A 70-foot 9 shaft, and 4 50-foot shafts had been put down and there was a small 10-11 stamp mill. The main shaft was later deepened to 120 feet with 12 levels at 50 and 100 feet. There are no records of operation after 13 1910. 14 References: C. B. Brown, 1934, written communication; 15-16 Bryson, 1937, p. 25; 17 Pardee and Park, 1948, p. 85;

Pratt, 1907, p. 53-54

```
1
      Gold mine, name unknown
      Type:
             Gold
      Location: Montgomery County, east of the Pee Dee River, about 1 mile
      northeast of Pee Dee.
  5 -
      Reference: Conley, 1962, p. 18; map.
 7
     Gold prospect, name unknown
1
      Type: Gold
2
     Location: Montgomery County, 1 mile east of the Pee Dee River and
           about 1 mile south of the Moratock mine. -
 5 ~
      Reference: Conley, 1962, map.
14
     Gold Bowl (Pugh) mine
 1
     Type: Gold
2
     Location: Randolph County, 6\frac{1}{2} miles northeast of Asheboro.
3
          The country rock is ferruginous sericitic quartz schist with
 5-
     sugary quartz stringers along the Kaminal of the schist. The Gold
6
     Bowl Mining Company in 1934 had one 60-foot shaft, 2 drifts with
     hoist, and a 1-stamp mill.
     References: C. B. Brown, 1934, written communication;
 10 --
                  Pardee and Park, 1948, p. 64.
11
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```
Gold Coin mine
 1
      Type: Gold
 2
      Location: Rowan County, near Gold Hill.
      Reference: Pardee and Park, 1948, p. 64.
  5 —
 6
    Golden Valley placers
1
     Type: Gold
2
     Location: Rutherford County, 4\frac{1}{2} miles from Brindletown on the First
          Broad River.
 5-
          An extensive alluvial flat. Over $60,000 in gold was produced.
6
     In 1934 hydraulicking operations were being carried out on the Rhyne
7
8
     estate and on other tracts in the area.
9
     References: Kerr and Hanna, 1888, p. 311;
 10-
                  Nitze and Hanna, 1896, map, p. 152;
11
                  Pardee and Park, 1948, p. 92.
12
19
       Gold Hill mine
 1
       Type: Gold
 2
       Location: Mecklenburg County, 6 miles north of Charlotte. -
       Reference: Pardee and Park, 1948, p. 63.
  5 ---
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Gold Hill (Randolph, Miller, Barnhardt, North, WGN, Myers) Mine

2

1

3

Location:

Type:

Gold Copper

extending

Rowan County, in the village of Gold Hill and for a distance of  $1\frac{1}{2}$  miles along a northeast-southwest

trending ridge,

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The country rock is a chlorite-sericite schist belonging to the volcanic series. The mineralized belt is part of a shear zone developed along a fault that separates schist on the east from intrusive granitic rocks on the west. Most of the lodes are in zones of silicified schist, and trend northeastward with the parting planes of the schist, but occasionally cut across the planes. The principal ore minerals are chalcopyrite, gold-bearing pyrite, native gold, small amounts of galena and sphalerite, and silver. Usually relatively high gold content goes with relatively low copper content and vice versa. Bismuthinite in minute particles is associated with gold and copper ores in the Barnhardt vein. The Randolph, Barnhardt, Miller, North, WGN, and Myers are veins or lodes of the Gold Hill Mine. Altogether 11 mineralized zones or veins have been discovered. The deposits were discovered between 1842 and 1844 and, except during the Civil War, they were mined until 1915. A 20-stamp mill was

erected in 1881; Mr. Richard Eames erected a 10-stamp 1 mill in 1893 and milled high-copper ores from the 2 Barnhardt vein. A shaft on the Randolph vein descends 3 to a depth of 800 feet and is the deepest in the Piedmont gold belt of North Carolina. Production records 5of the mine for the last period of operation, 1914-15, show a total of 7,250 tons of ore milled, from which were recovered 3,877 ounces of gold (0.53 ounce per ton) 603 ounces of silver, and 23/12 pounds of copper. The 9 total production of gold is estimated at \$2,505,000 in 10~ gold, retoned at \$20.67 per ounce. 11 12 References: Emmons, 1856, p. 154-165; 13 Kerr and Hanna, 1887, p. 347; 14 Laney, 1910, p. 100; 15~ Nitze and Hanna, 1896, p. 85-88; 16 Nitze and Wilkens, 1897, p. 57-60; 17 Pardee and Park, 1948, p. 88-91, 18 Stuckey, 1965, p. 291; 19 Weed, 1900, p. 471-479. 20-21 22 23 24 25

1 Gold Knob Mine 2 Gold Type: Rowan County, 9 miles southeast of Salisbury,  $3\frac{1}{2}$  to 4 Location: miles northeast of Rockwell, and 1 mile west of Dutch 5-Second Creek. Three quartz veins, the Haynes, the Gold Knob, and the Holtshauser, carry pyrite, and chalcopyrite, and form a low ridge in the biotite granite country 10-The mine was worked in the 1800's and the 11 Holtshauser vein was worked again in 1895. Eleven ore 12 leads were explored. A tunnel on one of the veins was 13 accessible in 1935. 14 References: C. B. Brown, 1934, written communication; 15-Kerr and Hanna, 1888, p. 282; 16 Laney, 1910, p. 113; 17 Nitze and Hanna, 1896, p. 120; 18 Nitze and Wilkens, 1897, p. 60; 19 Pardee and Park, 1948, p. 92. 20-21 22 23 24 25-

Goliham (Goliharn) (Smith) mine 1 Type: Gold 2 Location: Randolph County, 7 miles east of south of Asheboro. \_\_\_\_ 3 The country rock is slate with interbedded tuff, carrying sparse 5-pyrite. The mine was worked in the 1890's and around 1905. In 1934, 6 L. A. Smith was working the property. The surface had been panned for 1 mile in all directions. References: C. B. Brown, 1934, written communication; 10-Pardee and Park, 1948, p. 64. 11 Goodman mine Type: Gold 2 Location: Rowan County, southwest of Salisbury, east of the Southern Railroad. 5 ~~ Reference: Nitze and Hanna, 1896, p. 117. 18 Graf mine 1 See Bame mine, Rowan County. 2 22 23 24 25-

```
1
     Gragg placers
     Type: Gold
3
     Location: Avery County, near Gragg on the south slope of Grandfather
          Mountain and extending about 2 miles eastward.
                                                                     to 2700
          Gold-bearing gravels 3 to 15 feet thick on a pleateau of 2650 feet
7
          elevation were worked in the early 1900's.
9
     References: Bryant and Reed, 1966, p. 7;
 10-
                  Keith, 1903, p. 8.
11
     Graham mine
1
     Type: Copper, gold.
2
    Location: Lincoln County, on the farm of Maj. W. A. Graham, 4 miles
3
          northeast of Iron Station.
 5-
          A quartz vein 30 to 42 inches thick carried gold and copper.
6
    the 1880's the vein had been prospected by pits along nearly 100 feet
7
    of the outcrop. The mine was active in 1896 and 1897. In 1935 a new
    shaft had been sunk to a depth of 32 feet, but the lode had not yet
    been exposed.
11
    References: Kerr and Hanna, 1888, p. 221;
12
13
                 Nitze and Hanna, 1896, p. 150;
14
                 Pardee and Park, 1948, p. 76.
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Grampusville (Grampus) mine
     Type: Gold
2
     Location: Moore County, 3 miles southwest of the Bell mine; 4½ miles
3
           southeast of Carter, south of the Sewell property.
 5 --
     References: Bryson, 1936, p. 69;
                  Kerr and Hanna, 1888, p. 243;
7
                  Nitze and Wilkens, 1897, p. 56;
8
                  Pardee and Park, 1948, p. 64.
    Grandfather Mountain mine, north side
1
    Type: Gold
2
    Location: Watanga County, on the north side of Grandfather Mountain.
3
         Considerable ore was produced from quartz veins carrying gold and
 5-
6
    pyrite in black slate of the Hampton Formation. The main vein was 8 feet
    thick.
7
8
    Reference: Keith, 1903, p. 8.
    Grandfather Mountain prospects, east side
1
2
    Type: Gold
    Location: Caldwell County, on the east and southeast slopes of
3
         Grandfather Mountain
 5-
         Placers and quartz veins carrying gold are in sericitic phyllite and
6
    phyllitic siltstone country rock.
7
8
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References: Bryant and Reed, 1966, p. 7;

Grandman mim. 1 Type: Gold 2 Location: Montgorg County, 4 miles southwest of Ophir. 3 4 Rusty silloffied ore in varved slate carrying chalcondyite and 5chalcofite was such in 1934. Several shafts and a tunnel were seen in 1934. There once had been a 10-stamp mill. Reference: C. B. Brown, 1934, written communication; Pardee and Park, 1948, p. 63. 10-11 Grand Union Sold Mine 1 Type: Gold ٠ . 2 Location: Union County. The Grand Union Gold mine was a union of 3 the Wyatt, Howle, Bonnie Belle, and Perman mines. The ores are 4 described under these headings. 5~ Granville mine 1 See Marion Bullion Company mine, McDowell County -2 1 Gray mine 2 Type: Gold Location: Davie County, near Statesville, 3 References: Pardee and Park, 1948, p. 62.

```
Gray mine
 1
     Type: Gold
 2
     Location: Randolph County, 2 miles west of Asheboro.
 3
           The country rock is sheared acid tuff. The mine was last worked
  5 -
     before the Civil War, as indicated by the presence of poplar trees
      26 linches in diameter growing in an open pit.
 7
 8
     References: C. B. Brown, 1934, written communication;
                   Pardee and Park, 1948, p. 64.
 10-
11
     Grayson mine
 1
     Type: Gold
· 2
     Location: Rutherford County, south of Silver Creek Knob, near First
 3
          Broad River.
  5-
          Both placer deposits and auriferous quartz veins were mined before
 6
     1888.
 7
 8
     Reference: Kerr and Hanna, 1888, p. 312.
 9
21
       Grier mine /
 1
       See Woolworth mine, Mecklenburg County. (=
 2
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 25
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Griffin mine Type: Go1d 2 Location: Montgomery County, 1 1/2 miles northeast of the Russell mine, and may be the same as the Griffin mine in Randolph county. 5 --This was a glacer mine. 6 7 References: Kerr and Hanna, 1888, p. 253; R Pardee and Park, 1948, p. 63. 10-Griffin mine 1 Type: Gold 2 Location: Randolph County, in the southwest corner of the county, 3 \ 1½ miles northeast of the Russell mine in Montgomery County. ( This may be the same as the Griffin mine in Montgomery County 5--Gold is scattered through a schistose shear zone in sheared 6 silicified tuff. A large open cut was seen in 1934. At that time 7 the mine was owned by Arthur Ross. References: C. B. Brown, 1934, written communication; 10-Kerr and Hanna, 1888, p. 253; 11 Pardee and Park, 1948, p. 64. 12 23 24

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## Griffith (Bryant Park) property

Type: Gold

Location: Mecklenburg County, in the city of Charlotte, in Bryant

Park south of W. Morehead St.

A quartz vein in a shear zone in granite was found to contain little if any sulfide mineralization. A prospect pit about 25 feet deep was seen in 1934.

Reference: J.V. Lewis, 1934, written communication.

#### Gross mine

Type: Gold

Location: Yadkin County, 7 miles southeast of Yadkinville and about

2 miles northeast of the Dixon mine.

Quartz lenses and stringers from less than one inch to 8 feet in width have formed along faults and rifts in schist, which is partly silicified. The deposits are mineralized zones into which pyrite and gold have been introduced.

During 1913 and 1914 two veins were explored by two shafts, 100 and 20 feet deep, a 600-foot long open cut, and pits. A stamp mill and cyanide plant were erected at the neighboring Dixon mine to treat ores from both mines.

15- Reference : Pardee and Park, 1948, p. 104-105.

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Grupy mine
. 1 .
      Type: Copper, gold
 2
      Location: Rowan County,
           The ore carried chalcopyrite, pyrite, and chrysocolla.
  5-
6
      Reference: Genth and Kerr, 1881, p. 116.
7
 ^1
       Gunstocker Frospect
 2
       Type:
                    Copper
                    Jackson County, on the south side of Cany Fork, about
       Location:
                    1\frac{1}{2} miles northeast of the Brinkley Farm, and near
  5-
                    Cowarts, about \frac{1}{2} mile from the railroad. —
                          Pyrrhotite with minor pyrite, chalcopyrite, and
                    sphalerite occurs in quartz-biotite gneiss country
                    rock. The deposit is overlain by gossan. The vein is
 10-
                    about 6 feet wide and can be traced for a distance of
11
                     1,000 feet or more. The prospect has been opened by
12
                     a tunnel and several pits.
13
       References
                     Bryson, 1930, p. 25-26;
14
                    G. H. Espenshade, 1944, written communication.
  15-
23
       Hagler mine
 1
       See Maxwell mine, Mecklenburg County. (
 2
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Haithcock mine

Type: Gold

Location: Stanley County, 2½ miles northwest of Albemarle between the Hearne mine to the southwest and the Lowder mine to the northeast

The country rock is a greenish chloritic schist derived from a basic volcanic rock, cut by quartz veins 2 to 6 feet thick which are conformable with the schist. The gold occurs as free gold in the quartz and an places could be seen by the naked eye. This mine was opened in the middle 1800's and has been worked occasionally through the years. In the 1930's Mr. Ed Snuggs had a shaft sunk on a 3 to 5 foot wide quartz vein which contained free gold, but the work was soon abandoned.

References: Bryson, 1936, p. 79;
Bryson, 1937, p. 20;
Kerr and Hanna, 1888, p. 258;
Nitze and Hanna, 1896, p. 82;
Nitze and Wilkens, 1897, p. 54;
Pardee and Park, 1948, p. 93.

24

25

22

Hamilton (Bailey) mine 1 Type: Gold 2 Location: Anson County, 2 miles southeast of Wadesboro. 3 Two quartz veins from  $2\frac{1}{2}$  to 4 feet wide in altered slate near 5granite carried hard quartz and limonite. Assays showed values of \$14 to \$30 per ton. The mine was opened before the Civil War and 7 was worked in 1875 and in 1886. One vein was worked to a depth of 8 100 feet during the 1800's. Exploration work in 1933 and 1934 did not uncover anything of value. 10-11 References: C. B. Brown, 1934, written communication; 12 Bryson, 1936, p. 102; 13 Kerr and Hanna, 1888, p. 274; 14 Nitz and Hanna, 1896, p. 106; 15-Nitze and Wilkens, 1897, p. 57; 16 Pardee and Park, 1948, p. 62. 17 18 Hamilton mine 1 Type: Gold Polk County, South Mountain area. 3 Location: Reference: Nitze and Hanna, 1896, p. 174. 5 --

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1
      Hamme mine
             Tungsten
      Type:
2
      Location: Vance County, 3 miles west of Townsville, between Big
3
         Island Creek and Little Island Creek, about 1 mile south of their
         confluence.
 5-
               Quartz veins carrying huebnerite, small amounts of scheelite.
         and minor fluorite, rhodochrosite, pyrite, galena, sphalerite,
7
         chalcopyrite, and tetrahedrite, are in a northwestward trending
         belt 8 miles long in an albite granodiorite pluton parallel to its
 10-
         contact with schist. The deposit was discovered in 1942 by
11
         Joseph and Richard Hamme. Haile Mines, Inc., acquired the property
         in 1943, and a new company, Tungsten Mining Corp., was formed in
12
13
         June, 1945, by Haile Mines, Inc. and the General Electric Company.
14
               The mine was operated until August, 1954 At that time the
         total production was 577,000 short tons of WO3.
 15--
      References: Espenshade, 1947, p. 1-17;
16
                   Hidden, 1890, p. 45-78;
17
                   Parker, 1963, p. G1-G69;
18
                   Pratt, 1901, p. 32;
                   Stuckey, 1965, p. 344-345;
 20-
                   White, 1943, 9 p.;
21
                White, 1945, p. 97,
23
24
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1
      Hancock mine
      Type: Gold
      Location: Burke County, at the foot of the northeast slope of Hall's
3
4
           (Hill's) Knob.
 5-
           A placer gravel deposit 1 to 1\frac{1}{2} feet thick overlain by a peaty
      bed 25 feet thick was worked in the 1800's; and was being worked on
      a small scale in 1895.
9
 10-
      References: Kerr and Hanna, 1888, p. 312;
11
                    Nitze and Hanna, 1896, p. 164;
12
                    Pratt, 1914, p. 18.
13
14
     Hancock mine
1
           See Cagle mine, Moore County
2
      H and G mine
 1
             See Jones mine, Randolph County
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H. and H. mine (House property)
 1
      Type: Gold, copper, lead, zinc.
 2
     Location: Halifax County, 1.7 miles west of Glenview, north of the
 3
            paved road between Blenview and Ringwood.
 4
  5-
            Gold, copper, lead, and zinc ores were mined here by the H. and
 6
      H. Mining Company in 1954, 55, 56, and 57. This was the only gold
 7
      mine in operation in the southeastern United States in 1957.
 8
 9
                   Broadhurst, 1955, p. 18, 21;
      References:
 10-
                   Conrad, 1958, p. 35;
11
                   Stuckey and Conrad, 1961, p. 6-7;
12
                   Stuckey, 1965, p. 323-324.
13
       Harbin mine
  1
       Type: Gold
 2
       Location: Montgomery County, 2 miles southeast of Moratock.
            This was a placer mine in gravel underlying saprolite. Mining
  5 -
       was hindered by the scarcity of water and the tenacious nature of
       the saprolite. Old workings disclose 2 to 6 feet of gold-bearing
 7
       stream alluvium in a small valley and on a low bordering terrace.
       References: Bryson, 1936, p. 78;
  10-
                    Kerr and Hanna, 1888, p. 248;
 11
                    Nitze and Hanna, 1896, p. 80;
 12
                    Nitze and Wilkens, 1897, p. 52;
 13
                    Pardee and Park, 1948, p. 85.
```

Hard Hill mine 1 See Ellington mine, Mecklenburg County. 2 1 Hardin's mine 2 Type: Gold 3 Location: Watanga County, 1 mile north of Boone, possibly on Hardin Creek 5--6 Placer gold was mined. 7 8 . Reference: Pardee and Park, 1948, p. 65. Harkey "diggings" 1 Type: Gold 2 Location: Cabarrus County, near Five Pines 3 Unpromising prospect of the Virgilana type - chalcofite and bornite 5in greenstone. 7 8 Reference: Laney, 1910, p. 113. Harkey mine 1 Type: Gold 2 Location: Cabarrus Count, 5 miles southwest of Mount Pleasant. 3 A quartz vein from 6 to 24 inches wide carrying chalcopyrite, 5 --pyrite, and marcasite, in diorite country rock, was being explored by a 61-foot shaft in 1935. 7

Reference: Bryson, 1936, p. 88.

# Harkness mine 1 Type: Gold 2 Location: Union County, about $l^{\frac{1}{2}}$ miles northeast of the East Hill 3 mine, in the Moore Hill group of mines. 5-The ores are described under Moore Hill mine. The ore is a 6 continuation of the heavy quartz ore of East Hill, containing coarse 7 gold. The mine was worked after the Civil War for a length of 300 8 feet and a depth of 120 feet. 10-References: Bryson, 1936, p. 97; 11 Kerr and Hanna, 1888, p. 263; 12 Nitze and Hanna, 1896, p. 103. 13 Harlan (Larland) mine 1 Type: Gold, copper Location: Guilford County, the southern extension of the Deep River 3 mine, about 2 miles southeast of High Point. 4 5 --A quartz vein carrying gold, pyrite, and chalcopyrite in bands 6 occurs in muscovite granite. Two shallow shafts and a 10-stamp mill 7 were seen in 1934. The mine was abandoned when sulfides were found 8 at water level. 9 10-References: C. B. Brown, 1934, written communication; 11 Emmons, 1856, p. 174; 12 Kerr and Hanna, 1888, p. 278; Mining Magazine, 1865, 2nd, ser. 7. 2, p.28; 13

Pardee and Park, 1948, p. 62.

```
Harney mine
1
     Type: Gold
2
     Location: Randolph County, 7 miles southeast of Asheboro. -
3
          Highly ferruginous quartz sericite schist country rock containing
 5 -
     phyophyllite was seen. The mine was worked around 1860. Shallow
     shafts and pits were seen.
7
     References: C. B. Brown, 1934, written communication;
                  Pardee and Park, 1948, p. 64.
10-
    Harris mine
    Type: Gold
2
    Location: Cabarrus County, 2 miles east of Harrisburg.
         A two-foot quartz vein carrying gold and pyrite in diorite country
    rock/ Themine was worked in pre-Civil War days. One shaft, pits,
    and trenches were seen in 1934.
8
    References: C. B. Brown, 1934, written communication;
                 Pardee and Park, 1948, p. 62.
 10-
     Harris mine
     Type: Gold
2
     Location: Davidson County,
3
          Gold, pyrite, and chalcopyrite were noted in the ore.
 5 --
6
```

Reference: Genth and Kerr, 1881, p. 101.

1 Harris mine See Surface Hill mine, Mecklenburg County. 2 1 🗯 Harris prospect Type: Copper 2 3 Location: Alleghany County, at Roaring Gap. Auriferous chalcopyrite and bornite are reported. 5-Reference: Genth and Kerr, 1881, p. 92. 7 Harrison Mine 2 Gold Type: 3 Rowan County, southwest of Salisbury, east of the Location: Southern Railroad, and 4 miles southwest of 5--Granite Quarry. 6 7 A small quartz vein in highly sheared and 8 weathered diorite was worked in 1895. Four pits were seen in 1934. 10-Brown, C. B., 1934, written communication; References: 11 Nitze and Hanna, 1896, p. 117. 12 Hartman mine 1 Type: Gold 2 Location: Rowan County, 2 miles southwest of Salisbury; east of the 3 Southern Railroad. — (

```
1
    Hastings prospect
     Type: Tin
 2
     Location: Gaston County, 2 miles S. 65° W. of Landers Chapel.
 3
  5--
          Cassiterite occurs in greisen gangue in an ore body conformable
     with the muscovite gneiss wall rock. Cassiterite-bearing pegmatite was
     found on the surface for a distance of 100 feet in a northerly direction.
 7
          The deposit was opened by a 14-foot shaft and a cross cut trench
 8
     which were inacessible in 1940. The deposit is called the T. S. Hastings
 9
    prospect by Kestler, and the H. P. Hastings prospect by Keith and
11
     Sterrett.
12
, 13
    References: Keith and Sterrett, 1918, p. 145;
                  Kes$ler, 1942, table 18.
14
 1 F
     Hauss (House) mine
 1
     Type: Gold
 2
     Location: Lincoln County, 4 miles west of Lincolnton, on the farm of
 3
          C. M. Haefner.
  5-
          Two veins of white quartz each 2 to 3 feet thick and carrying
 6
     sulfides were seen in a granitic saprolite country rock. The ore was.
 7
     assayed at 0.17 ounces of gold and a little silver per ton. The mine
 8
     was worked before the Civil Was. A pit 5 feet deep was all that
 9
     could be seen in 1935.
  10-
11
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Reference: Pardee and Park, 1948, p. 76-77.

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#### Haw Branch Road mine

Type: Copper

Location: Moore County, 1.6 miles northeast of Glendon, taking the paved road from Glendon for 0.9 mile, turning east on Haw Branch Road for 1.3 miles, and taking a logging road which turns to the north and forks at a sawdust pile. The mine is 1,000 yards beyond the sawdust pile on the right fork of the road.

The ore body is highly silicified cherty rock brecciated and replaced by feldspar, quartz, and calcite. The ore body strikes N.30°E., dips 60°NW and is about 30 inches thick. The ore minerals are cuprite, bornite, quartz, and malachite in a gangue of calcite, chlorite, quartz, and orthoclase. Assays by the Tennessee Copper Company gave 0.85 percent copper, 0.02 ounce gold per ton, and 0.18 ounce silver per ton. Two shafts were seen, one 150 feet deep, the other caved. A 50-foot long trench runs between the shafts.

Reference : Conley, 1958, p. 61; 1962a. p. 27.

#### Hayes mine

Type: Gold

Location: Gaston County, northeast corner of the county.

Reference: Pardee and Park, 1948, p. 62.

```
Hayes mine
1
       Type: Gold
2
      Location: Mecklenburg County, 5 to 10 miles northwest of Charlotte,
3
 5-
     Reference: Pardee and Park, 1948, p. 63.
6
7
8
     Haynes mine
 1
    Type: Gold
2
    Location: Rowan County, adjoining the Gold Knob mine, 40 rods to the
3
         southwest.
 5-
    The ore carried sulfides.
7
    References: Genth and Kerr, 1881, p. 116;
8
                 Kerr and Hanna, 188%, p. 282.
9
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Hazel Creek (Adams, Everett) mine

Type: Copper

Location: Swain County, in a tributary valley of Sugar Fork, about 6 miles from the former settlement of Proctor.

The deposit is made up of a group of curving, lenticular veins that overlap one another to form a pipelike orebody, parallel to the foliation in schistose phyllite and feldspathic sandstone country rock. The principal sulfide mineral is chalcopyrite, with sphalerite, cubanite, galena, and phyrrhotite. Copper and zinc are present in nearly equal proportions. The better ore is massive, and grades into stringers of chalcopyrite and sphalerite in phyllite. The deposit was capped by 5 feet of gossan overlying several feet of sufergenc chalcocite, native copper, cuprite, covellite, and pyrite. The massive hypogene ore contains 3-3.5 percent copper, 3-3.5 percent zinc, and 0.5 percent lead. Lower grade sulfide stringers in phyllite contain 1-1.7 percent combined copper and zinc. The sufergene ore contained 12.5 percent copper, 3.5 percent zinc, and 1.37 ounces silver per ton.

The mine was first opened about 1900, but after a few years operations ceased because the property became involved in litigation. In 1927 and 1930 the Dicktown Chemical and Iron Co. explored the property by means of diamond drilling. The mine was reopened late in 1942 by the North Carolina Mining Co., and was operated until November 1944, when the property was acquired by the Tennessee Valley

Authority and the mine closed. Nearly all the mine workings, adits,

trenches, and opencuts, were opened during the early 1900's. A small

concentrating mill was erected in 1944. Ore shipped in 1943 and 1944

contained 415,722 pounds of copper. There is no record of ore shipments prior to 1943. Ore reserves were estimated at 17,000 short

tons of high grade hypogene ore and 32,000 short tons of low grade

ore above the 2,700 foot altitude prior to mining in 1943. About

3,000 short tons of high grade ore were mined in 1943-1944.

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12 13 References: Espenshade, 1963, p. 23-34;

Hunter and Gildersleeve, 1946, p. 16;

Pratt, 1904, p. 21;

Stuckey, 1965, p. 285.

### Headrick mine

Type: Copper, gold

Location: Davidson County, near the Boss mine and near David Beck's mine, about 5 miles west of Silver Hill.

Chalcopyrite and pyrite with gold occur in a quartz vein in dark blue chloritic slate country rock. The vein was traced for one mile along the surface. The vein material was worth \$1.00 per bushely with 1850's.

At a depth of 20 feet the lode was 30 inches thick and carried 15 percent copper. Bands of mineralized country rock, quartz carrying gold, and sulfide ores constitute the lode.

Reference: Emmons, 1856, p. 186, 204-205.

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Hearne (Herne) mine

Type: Gold

Location: Stanly County, about 2½ miles northwest of Albermarle, adjoining the Haithcock mine to the northeast.

The country rock is a greenish chloritic schist derived from a basis volcanic rock. Two quartz veins about 500 feet apart that range from 2 to 6 feet in width consist largely of milky white quartz with carbonate and iron oxides and native gold, at places visible to the naked eye. Most of the rock appeared to be barren; the rich ore apparently occurs in scattered pockets. In 1856 Emmons reported the mine working and that 8 quarts of selected ore yielded \$80 (4 ounces). It was worked off and on through the years. In 1931 development work was done by Mr. W. L. Cotton who erected a 5-stamp mill. He recovered a small amount of gold in the mill, as well as a specimen of ore containing \$600 in gold (30 ounces). The workings consist of trenches, pits, and shafts, none apparently deeper than water level, distributed along a northeasterly course for nearly a mile.

References: Bryson, 1936, p. 79;
Bryson, 1937, p. 20;
Emmons, 1856, p. 167;
Kerr and Hanna, 1888, p. 258;
Nitze and Hanna, 1896, p. 258;
Nitze and Wilkens, 1897, p. 54;
Pardee and Park, 1948, p. 93.

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Heath (Donnell) mine
1
      Type: Gold
2
      Location: Guilford County, 6 miles southeast of Greensboro.
           Quartz veins carrying oxidized ore with remnants of chalcopyrite
 5-
      and pyrite were seen in muscovite granite country rock. Old pits
      and shafts were seen. Work was being done in 1934 by Hartzell.
7
      References: C. B. Brown, 1934, written communication;
9
                   Pardee and Park, 1948, p. 62.
 10-
11
12
      Hedge mine
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        see Hodge mine, Burke County
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## Heglar prospect

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Type: Rare-earths

Incation: Cabarrus County, on a tributary of Hamby Branch, approximately 750 feet south of the road through Cold Springs, and adjacent to the Faggart gold mine.

The deposit is a replacement deposit in amphibolite at the contact of metavolcanic and metasedimentary rocks and a prick granite intrusive into gneissic granite rock. The deposit is disseminated pyrite and andradite in a fine-grained siliceous matrix containing opal and chacedony. Other minerals in the ore chalcopyrite, sphalerite, galena, molybdenum, epidote, allanite, magnetite, apatite, and noteworthy amounts (0.14-0.42%) of rare-earth elements of the cerium group. The deposit is radioactive, probably due to the residual weathering products of allanite, which contains 0.35-2.23% thorium. Nearby are gold-quartz vein deposits.

The deposit was discovered by airborne radioactivity survey, and was examined by the U. S. Geological Survey in 1956. A shaft was sunk on the radioactive anomaly in the mid-1950's by A.L. Nash.

Reference: Sundelius and Bell, 1964, p. 207-221.

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Hegler mine

See Hepler, Claude, and Hepler mines, Davidson County.

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Heilig mine
    Type: Gold
    Location: Cabarrus County, 41/2 miles east of Concord; 1/2 mile west of
         Adams Creek. —
 5-
         Large specimens of quartz showing coarse gold were found in a trench
    cut in diotite granite country rock. No definite vein was discovered.
7
8
    Reference: Pardee and Park, 1948, p. 71.
 10-
 1
      Helms, Mrs. John, mine
2
       Type: Gold
      Location: Mecklenburg County, 2 miles southwest of Griffith.
 5-
      Reference: Pardee and Park, 1948, p. 63.
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Hemby mine 1 Type: Gold 2 Location: Union County, 4 miles southwest of Indian Trail, north 3 and west of the Lewis-Phifer lead, in the Moore Hill group of mines. 5-The ores are described under Moore Hill mine. Shallow workings 7 extend for a distance of 1,200 to 1,500 feet along the strike. Two 8 shafts, 150 and 190 feet deep, were sunk by John Vivian in about 9 1889-1890. The ore carried relatively high amounts of galena and 10silver, as well as glassy quartz and siderite. 11 12 References: Brown, C. B., 1934, written communication; 13 Bryson, 1936, p. 96-97; 14 Kerr and Hanna, 1888, p. 262-263; 15-Nitze and Hanna, 1896, p. 103; 16 Pardee and Park, 1948, 101-102. 17 Hemby, Thomas, mine 1 Type: Gold 2 Location: Union County, probably the northeasternmost of a series of 3 mines comprising also the Black, Smart, and Secrest mines, and probably similar to these. 5--Reference: Nitze and Hanna, 1896, p. 98. 7

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1
      Henderson mine
       Type: Gold
2
      Location: Mecklenburg County, 5 to 7 miles northeast of Charlotte;
3
            1.2 miles northeast of the Statesville road, and 1.13 miles
 5-
           west of Derita.
7
            Gold, pyrite, and chalcopyrite were noted in the ore, which
      also carried silver. The mine was worked before the Civil War and
      again around 1887 to 1889, when a 100-foot shaft was sunk which
9
       intersected 3 bodies of ore varying in sixe from 1\frac{1}{2} to 4 feet in
 10-
11
       thickness.
                 At one time there was a 10-stamp mill on the property.
12
13
      References: Bryson, 1936, p. 124;
                    Genth and Kerr, 1881, p. 111;
 15-
                    Kerr and Hanna, 1888, p. 300;
16
                    J.V. Lewis, 1934, written communication;
17
                    Nitze and Hanna, 1896, p. 141;
18
                    Pardee and Park, 1948, p. 63.
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Henderson mine 1 Type: Gold, lead, zinc. 2 Location: Montgomery County, 100 yards northeast of the village 3 of Eldorado. Ĺ 5 -Galena, sphalerite, and pyrite are found on the dumps. In 1887 there was a string of prospect pits. Later a shaft was put down, which was dewatered in 1957, but mining was not resumed. The mine was supposedly worked for lead, zinc, and gold. 10-References: Conley, 1962, p. 18; 11 Kerr and Hanna, 1888, p. 201, 248. 12 13 Henderson mine 1 Type: Gold 2 Location: Stanly County, near New London. 3 Reference: Pardee and Park, 1948, p. 65. 19 20-21 22 23 24

Henry Shaft 1 Type: Tin 2 3 Location: Lincoln County, 1 mile southwest of the Condon shaft, of the Ka-Mi-Tin mine. 5-Cassiterite was found in a 12-foot wide pegmatite dike near its 6 contact with muscovite and hornblende gneiss and schist wall rock. A 7 60-foot shaft with 30 feet of drifting was sunk in 1905. 8 9 10-References: Kestler, 1942, table 18; 11 Pratt, 1907, p. 21. Henson, Pat, mine 1 Type: Gold 2 Location: Mecklenburg County, 9 miles east of Charlotte. 3 4 Reference: Pardee and Park, 1948, p. 63. 5--Hepler, Claude, (Hegler) and Helper mines 1 Type: Gold 2 Location: Davidson County, 2 miles northwest of Cid. \_ 3 4 Quartz veins in rusty sericite schist carry gold. Below the 5-zone of oxidation the primary one carried copper. The mine was operated in the 1830's, but was abandoned when copper was encountered 7 below the gold ore. Several pits were seen in 1934. 8 9

References: C. B. Brown, 1934, written communication;

Mining Magazine,

, X. 2, Xo. 2, p. 173, 198, (1854,

10-

11

```
Hercules mine
1
     Type: Gold
2
     Location: Caldwell County, 12 miles north of Morganton, near Hartland.
3
          Not located on map. This mine is also (reputed) to be in Burke
          County.
 5~
6
          Twenty quartz veins varying in width from a few inches up to 1
7
     or 2 feet carry gold, chalcopyrite, galena, and pyrite. Mr. Robert Orr
8
     sank many small shafts here, some (up to 60 to 70 feet deep, in the early
              In 1930 a shaft was sunk to a depth of 110 feet, and a rich
 10-
11
     pocket of high-grade ore was encountered which yielded $1,500 in gold.
     The property was idle in 1936, then was sold to Tennessee interests.
12
13
    References: Bryson, 1936, p. 137-138;
14
                  Bryson, 1937, p. 15;
 15-
                  Pratt, 1907, p. 35.
16
     Hercules mine
1
           See Emmons mine, Davidson County.
2
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      Herring mine
 1
            See Lafflin mine, Randolph County
 2
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High Point mine
 1
     Type: Gold
     Location: Guilford County, 2 miles southwest of High Point.
 3
           A lenticular mass of bull quartz over 10 feet thick at the
 5-
     center and dipping 45° carried chalcopyrite and limonite. Work done
     in 1905 showed that the ore would not pay the bare milling expenses.
 7
     Reference: Pratt, 1907, p. 38.
 9
 10-
 1
      High Shoals mine
      Type: Gold
 2
      Location: Gaston County,
 3
      Reference: Genth and Kerr, 1881, p. 103.
 5-
16
 1
     Hill mine
     Type: Gold, copper
2
     Location: Cabarrus County, about 8 miles from Concord and 1 mile
3
4
          southwest of where the Concord road crossed the Mount Pleasant
          road in 1856. -
 5-
         Chalcopyrite and iron carbonate were in a quartz vein about 18 inches
7
     wide in syenite country rock.
9
     References: Emmons, 1856, p. 202-203;
 10-
                  Kerr and Hanna, 1888, p. 208.
11
```

Hill (Talbert) mine 1 Type: Gold 2 Location: Randolph County, southwest corner of the county, 12 miles 3 southwest of Asheboro. ——( 5-Quartz veins in slate and acid tuff were seen. The mine was 6 worked in 1909 and in 1932, when ore was taken from one hole 15 feet in diameter. The mine is said to have been salted. 9 References: C. B. Brown, 1934, written communication; 10-Pardee and Park, 1948, p. 64. 11 12 Hill mine 1 Type: Gold 2 Location: Rowan County, southwest of Salisbury, east of the Southern 3 Railroad. Reference: Nitze and Hanna, 1896, p. 117. 20-21 22 23 24 25

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Hipps (Hipp) mine
1
     Type: Gold
2
     Location: Mecklenburg County, 7 miles northwest of Charlotte, o.3 miles
3
           south of Trinity Church on McIntyre Branch.
 5-
          A quartz vein one to two feet thick carrying gold, pyrite, and
     chalcopyrite occurs in soft ferruginous decomposed slate and syenitic
7
     granite. Numerous shafts, pits, and open cuts were made in an east-
     west direction along a beet nearly one-quarter mile long.
9
 10-
                  Genth and Kerr, 1881, p. 111;
11
                   J. V. Lewis, 1934, written communication;
12
                   رمورا)
Mining Magazine, 1853, v. 1, no. 6, p. 593;
                   Pardee and Park, 1948, p. 63.
14
    Hodge (Hedge) mine
    Type: Gold
2 +
    Location: Burke County, about 3 1/2 miles north of Pilot Mountain, on
3
4
         Silver Creek.
 5.
         Placer deposits were mined along the creek bottoms. A number of
6
    prospect pits were sunk in 1894 in garnetiferous sillimanite schist
7
    containing secondary quartz which was mistaken for gold ore. It was
    found to contain only traces of gold and not more than 1 ounce of
    silver per ton.
11
    References: Bryson, 1930, p. 17;
12
```

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Nitze and Hanna, 1896, p. 165.

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Hodges (Hodgins) Hill mind-

Type: Gold

Location: Guilford County, 6 miles south of Greensboro and about

2 miles east of the Fisher Hill mine. -

Gold with chalcophysite occurred in a heavy flat lying quartz vein from 6 inches to 12 feet in width in granite country rock. The vein has furnished many fine quartz crystals. Other minerals in the vein are pyrite, sidepte, limonite, manganese oxides, malachite, and red copper oxide. The mine has been abandoned for some time before 1856. Pits were sunk along the outcrop for a distance of 800 to 900 feet.

References: Bryson, 1936, p. 105;

Emmons, 1856, p. 173;

Kerr and Hanna, 1888, p. 205-206, 278;

Nitze and Hanna, 1896, p. 110;

Nitze and Wilkens, 1897, p. 45;

Pardee and Park, 1948; p. 62.

21 22

23

24

## 1 Hicke mine Type: Gold Investion: Lincoln County, 4 miles southeast of Lincolnton. 3 Before 1888 the mine had been opened to a depth of 110 feet and 5, Wrifts were run for some length. 6 7 Noferences: Kerr and Hanna, 1888, p. 306; 8 Nitze and Hanna, 1896, p. 150. 10 11 Holland mine 1 Nee Eddleman mine, Gaston County. 2 14 1 Holland prospect 2 Type: Tin 3 Location: Gaston County, about 1 mile south of the Jones mine. 5 Cassiterite occurs in greisen gangue in muscovite schist and gneiss. 7 Reference: /Kesler, 1942, table 18. 24

Holloway mine

Type: Copper

Location: Granville County, 3 miles south and 1 mile west of

Virgilina; 1 mile east of Crooked Creek and approximately

2 miles west of Aaron's Creek.

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Two veins were traced in schistose tuffaceous and porphyritic The principal vein trends N.15  $^{\rm O}{\rm W.}$  and cuts Virgilina greenstone. the schistosity of the country rock at an angle of 45°. The richest ore occurred in 2 shoots which together were about 300 feet long, 5 to 100 feet wide, and which extended to a depth of at least 450 feet from the surface. The ore minerals were chalcocite intergrown with bornite, and malachite, azurite, argentite(?), cuprite, native copper, and native silver in a gangue of quartz, epidote, chlorite, hematite, and pink feldspay. Copper carbonate stains were discivered by William S. Holloway while plowing on his farm in 1880. He sink a test pit to a depth of 15 or 20 feet, exposing promising In 1884 the mine was sold to Judge A. W. Graham; in 1885 first to McPherson and Heitman and later to Ragan and Gaither, and in 1887 to William M. Pannebaker. He sold one-half interest to W.E.C. Eustis in 1897. It was at this time that the actual development of the mine began. Five shafts were sunk, one to a depth of 440 feet, and ore was shipped until March, 1903. In 1905 Philadelphia parties, backed by Harrisburg politicans, partially reopened the mine but trouble arose for the backers and the work was soon discontinued.

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The dump was sold for use as macadam and railroad ballast in 1909.
1
      The production of the mine is estimated at approximately 45,000 tons
2
      of 6% copper ore.
3
      References: Kerr and Hanna, 1888, p. 217;
 5 -
                   A. R. Kinkel, Jr., 1960, written communication;
6
                   Laney, 1917, p. 114-124;
                   | 1900, p. 458-461;
| Weed, 1911, p. 79-81.
                   Stuckey, 1965, p.288;
9
     Holshouser (Holtshauser) mine
 1
           See Bame mine, Rowan County.
2
13
     Holt mine
 1
      Type: Gold
 2
      Location: Alamance County,
 3
      Reference: Genth and Kerr, 1881, p. 91.
10
 1
       Hood mine
       Type: Gold
 2
       Location: Mecklenburg County, 2 miles southwest of Mint Hill.
 3
       Reference: Pardee and Park, 1948, p. 63.
  5-
 25-
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Hopper Branch prospect
     Type: Copper
     Location: Jackson County, about \frac{1}{2} mile southwest of the Wayehutta
3
          mine, near the head of a gully.
 5-
6
          Coarse, massive feldspar-garnet-biotite gneiss with disseminated
7
     pyrrhotite was seen on the dump. No massive sulfides were observed.
8
     An open cut or tunnel, 30 to 40 feet long, was dug many years ago.
 10--
     Reference: G. H. Espenshade, 1944, written communication.
11
     Hoover mine
 1
     Type: Lead
     Location: Bavidson County, 2 miles south of the Boss mine.
3
4
          Coarse, crystalline galena was found in a quartz vein in
 5 -
                                   adepth of
     limestone which dwindled out at 10 feet. depth>
6
7
     Reference: Emmons, 1856, p. 209.
 20-
      Hoover mine
 1
      Type: Gold
      Location: Guilford County,
      Reference: Pardee and Park, 1948, p. 63.
  5-
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1
       Hoover (Rhyne) mine
       Type: Gold
3
      Location: Mecklenburg County, \frac{1}{2} mile southwest or 2 miles southeast
            of Mt. Holly, at Paw Creek.
 5 -
          This mine was
           Known as Dr. Strong's old gold mine in a zone of dioxite.
6
7
       Several shafts, pits, and open cuts expose rusty, cellular quartz
       veins.
 10-
       Reference. J.V. Lewis, 1934, written communication;
11
                   Pardee and Park, 1948, p. 63.
       Hoover, Bob, mine
2
       Type: Gold
       Location: Mecklenburg County, 2 miles northwest of Pineville.
3
      Reference: Pardee and Park, 1948, p. 63.
 5-
î
       Hoover, Jas. (McCall) mine
2
       Type: Gold
      Location: Mecklenburg County, 8\frac{1}{2} miles northwest of Charlotte.
 5-
            Prospecting was done at this mine in the 1930's by the Stark
      Gold Mining Corp.
8
      References: Bryson, 1937, p. 16, 27;
                    Pardee and Park, 1948, p. 63.
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Hoover Hill mine

Type: Copper

Location: Randolph County, about 17 miles southeast of High Point on the east side of the Uharia River, and 12 miles northwest of Asheboro. ——(

The country rock is dark-gray devitrified rhyolite of the volcanic series containing phenocrysts of glassy quartz and dull white feldspar. Pyrite is common accessory mineral. Free-milling gold and sulfide minerals are contained in a multitude of quartz seams ramifying in all directions through sheared and brecciated zones in the rhyolite. The principal ore body is the Briols shoot, which was 70 feet long and 12 feet wide at a depth of 350 feet, and assayed \$8 to \$10 per ton. Six other ore bodies were also worked.

The deposit was discovered by Joseph Hoover in 1848. Shortly thereafter it was sold to McDowell, Woodfin, and Avery, who worked the mine for several years, and leased parts of it to tributors.

After a long period of idleness the mine was bought by the Hoover Hill Gold Mining Co., Ltd., of London, in 1881. This company erected a 20-stamp mill, and worked the mine until 1885. L. A. Briols bought the mine in 1907. Ore was produced in 1914 and 1917, but after 1922 the mine was allowed to flood. The Briols shaft was 350 feet deep with levels at 70, 130, 170, 230, 300, and 350 feet. The Hawkins shaft and the Gallimore shaft also entered the mine. From May 1881

## Hoover Hill mine (con't.)

```
to June 1895 the output of the mine amounted to $300,000; the output
1
      during
      the period 1848 to 1881 is estimated at $50,000. In 1936 the
2
      Keystone Mining Company was planning to unwater the mine shafts and
3
      use the water to hydraulic the hillsides.
4
 5--
      References: C. B. Brown, 1934, written communication;
6
                   Bryson, 1936, p. 69;
7
                   Kerr and Hanna, 1888, p. 256-257;
                   Nitze and Hanna, 1896, p. 56-57;
                   Nitze and Wilkens, 1897, p. 47;
 10-
                   Pardee and Park, 1948, p. 85-86.
11
12
      Hopewell (Kerns, Kearns) mine
 2
      Type: Gold, copper
 3
      Location: Mecklenburg County, 10 or 11 miles northwest of Charlotte. -
  5-
           Gold, pyrite, chalcopyrite, and chrysocolla were carried in a
 6
      vein 2 feet in thickness which assayed 12 to 18 percent copper and up
      to $17.00 per ton in gold. The last known work was done in the 1870's
 7
      or 188%'s to a depth of 140 feet.
 8
 10-
      References: Bryson, 1936, p. 122;
11
                   Genth and Kerr, 1881, p. 110-111;
12
                   Kerr and Hanna, 1888, p. 209;
13
                   Nitze and Hanna, 1896, p. 139;
14
                   Pardee and Park, 1948, p. 63.
```

Hopkins, Dan, (Hopkins No. 2) mine 1 2 Type: Gold Location: Cabarrus County, 5 miles north of Mount Pleasant; near 3 Crossroads; 1 miles north-east of the Cline mine. 5 -of Gold-bearing pyrite with chalcopyrite occur in a gangue quartz, 6 calcite, siderite, and specular hematite in diorite country rock 7 near its contact with greenstone. The mine was worked in the 9 1890's. Several old pits were seen in 1934. 10-References: C.B. Brown, 1934, written communication; 11 Laney, 1910, p. 113; Pardee and Park, 1948, p. 62. · 13 Hopkins No. 1 mine 1 Type: Gold 2 Location: Cabarrus County, 3 miles north of Mount Pleasant, near 3 Foil's Mill, in the Gold Hill district. 5 -Gold-bearing quartz-epidote fissure - veins similar to the 6 Virgilina type occur in sheared and altered greenstone country rock of mafic volcanic origin. Ore minerals are bornite, and chalcocité, with very little chalcopyrite or pyrite. The prospect is considered to be unpromising. 10-11 References: C.B. Brown, 1934, written communication; 12 Inney, 1910, p. 112-113; 13 Pardee and Park, 1948, p. 62. 14

```
Hopkins No. 2 mine
 1
      See Hopkins, Dan, mine, Cabarrus County.
 2
 3
     Hornbuckle prospect
 1
2
     Type: Copper
                                                       In a belt of copper
3
     Location: Jackson County,
           localities including Shall Ridge, Wayehutta, and Buck Knob
16
     Reference: Smith, 1875, p. 113.
 10-
      Honey Ridge mine
 1
         See Aberdeen mine, Guilford County.
 2
13
      Horse Cove placer
 1
      see Ammons Branch glacer, Macon County
 2
16
      Horton, J. C., shaft (Chestnut Hill vein)
 1
 2
      Type:
             Tin
      Location: Caston County, about 1 mile south of the Ormond-Carr
3
 4
           prospect, and east of the summit of Chestnut Ridge.
 5-
           Cassiferite occurs in muscovite schist and gneiss. A 122- foot
7
      shaft was sunk on the vein, which was reported to be 7 feet wide
      at 100 feet depth. The work was done in the 1890's by Mr. J. C.
      Horton.
 10-
```

Reference: Kesler, 1942, table 18; Pratt and Sterrett, 1904, p. 28.

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Horwitz mine
      Type: Gold
     Location: Guilford County, 5 miles southeast of Greensboro.
     Reference: Pardee and Park, 1948, p. 63.
  5-
      House mine
 1
         see Hauss mine, Lincoln County (
 10-
     House (McGrew) mine
 1
     Type: Gold
     Location: Randolph County, 1 3/4 miles south of Asheboro.
          White vein quartz containing a few pyrite casts was seen in
· 5-
     quartz sericite phyllite schist. The mine was worked around 1925.
6
     The main shaft was said to be 90 feet deep. A cross-cut connected
     this with another shaft at the north end.
     References: C. B. Brown, 1934, written communication;
 10-
                  Pardee and Park, 1948, p. 64.
11
22
     House property
           See H and H mine, Halifax County
 25
```

1 Hovey mine 2 Type: Gold Location: Mecklenburg County, 2 mile south of the Capps mine, on the south bank of a small stream. Heavy white quartz veins carrying gold outcrop in sheared 6 sericitic granite. A tunnel on the south bank of the stream and 7 several pits and open cuts were seen in 1934. Another tunnel to the 8 9 north on King's property was part of the original Hovey mine. Surface workings extending on la miles indicate a lode trending north to 10slightly northeast worked in both the Hoxey and McGinn mines. 11 12 References: J.V. Lewis, 1934, written communication; 13 Pardee and Park, 1948, p. 63, 77. 14 Hovis, M. V., prospect 1 Type: Tin 2 Location: Gaston County, 1 2/3 miles N. 12° E. of Long Creek Church. 3 Cassiterite is found in loose crystals and in small boulders 5of greisen scattered over a field. The country rock is hornblende schist. A 35-foot shaft was inaccessible in 1942. 7 8 References: Keith and Sterrett, 1918, p. 143; Kesler, 1942, table 18; 10-Pratt and Sterrett, 1904, p. 28-29. 11

```
Howard mine
1
     Type: Gold
     Location: Rowan County, 8 to 10 miles east of Salisbury;
3
4
 5-
     Reference: Kerr and Hanna, 1888, p. 282.
6
7
8
1
     Howard Creek placers
2
     Type: Gold
     Location: Watanga County, along Howard Creek, about 2 miles north of
          Boone.
 5~
6
          Gold-bearing gravels along Howard Creek on a plateau of about
     3550 to 3600 feet elevation were mined.
8
     References: Keith, 1903, p. 8;
 10-
                  Pardee and Park, 1948, p. 65.
11
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Howell mine
 1
       Type: Gold
 2
       Location: Mecklenburg County, the southern extension of the Rudisil
 3
            lode, near the city limits of Charlotte.
  5--
            Sulfides and brown oxidized ores occur in a vein 2 to 4 feet
 6
       wide which has been worked to a depth of 32 feet with more than
 7
       50 feet of levels.
 8
 9
                     Bryson, 1936, p. 117;
       References:
  10-
                     Kerr and Hanna, 1888, p. 293;
11
                     Nitze and Hanna, 1896, p. 131;
12
                     Pardee and Park, 1948, p. 63.
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U. S GOVERNMENT

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Howie (Colossus, Lawson) mine

Type: Gold

Location: Union County, 3 miles northeast of Waxhaw and 1 mile southwest of the Bonnie Belle mine. In 1854 the Lawson mine was separated from the Howie by a plumb line, for they were apparently two sides of the same vein.

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The country rock is a fine-grained gray schist of the slate series, intruded along fractures by basic and aplitic dikes, and decomposed to saprolite to a depth of 50 feet or more. The ore lode is an indefinitely bounded zone in which the schist has been largely replaced by fine-grained quartz, pyrite, pyrrhotite, and gold, and extends for more than 2,800 feet parallel to the foliation of the schist. In the weathered zone the lode consists of light brown soft rock with ribs of hard, sugary quartz parallel to the foliation; the unaltered ore is a hard, flinty rock with bands of quartz and chlorite The ore bodies are tabular or cylindrical parts of the or biotite. lode where the gold-bearing seams are rich enough to make the ore The mine was discovered before 1840 as a result of placer workable. mining. In 1854 the mine was taken over by Commodore Stockton, who operated it until the Civil War. It was operated from 1885-1890 by a Mr. Reeves. It was purchased in 1890 by Isaac and John Bates who operated the old mill for a short time. In 1894 Callow and Gayford erected a cyanide plant and did considerable development work. were succeeded in about 1904 by the Colossus Gold Mining and Milling

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Company, which built a 500-ton cyanide plant. The Howie Mining
1
    Company operated the mine from 1913-1917. In 1934 the Condor Consoli-
2
     dated Mines, Ltd. of Canada, took over the mine, unwatered old shafts
3
    and drifts and explored the mine by core drilling, which revealed
4
     approximately 70,000 tons of ore averaging $15 per ton. The workings
 5-
     consist of the Cureton shaft, 355 feet deep; and the Bull Face, Old_
6
    Neddy, New Neddy (Nettie), Pansy, Bracy, Nigger, and William shafts.
7
     The Howie, together with the Wyatt, Bonnie Belle, and Penman mines,
8
    makes up the "Grand Union Gold Mine." It was estimated in 1934 that
9
     the gross production of gold had been 50,000 ounces.
 10-
11
    References: Bryson, 1936, p. 99-102;
12
                  Bryson, 1937, p. 18;
13
                  Emmons, 1856, p. 133;
14
                  Graton, 1906, p. 87-89;
 15-
                  Kerr and Hanna, 1888, p. 261-262;
16
                  Lieber, 1858, p. 56-57;
17
                  Mining Mag., lst ser., v. 2, p. 70; 1854;
18
                  Nitze and Hanna, 1896, 104-106;
19
                  Nitze and Wilkens, 1897, p. 63;
 20-
                  Pardee, F. C., 1934, written communication;
21
                 Pardee and Park, 1948, p. 97-101.
22
     Hudson mine
 1
      Type: Gold
 2
      Location: Guilford County.
 3
```

Reference: Pardee and Park, 1948, p. 63.

1 Hunnicutt (Union Copper) Mine 2 Gold, copper Type: 3 Rowan - Cabarries County, southwest of the Old Field Location: Mine. 5-Low-grade silicified copper ore occurs in quartz and in altered schists in a fault zone parallel to the Gold Hill fault. The ore minerals are chalcopyrite, pyrite, galena, and sphalerite, with a small amount 10of gold. The ore averaged  $1\frac{1}{2}$  to 3 percent copper. 11 The vein was discovered in 1842. The mine was most 12 active from 1899 to 1906. The main shaft was 600 feet 13 deep, in an ore body 130 feet long and 40 feet wide 14 near the surface. The mine produced 5,000,000 pounds 15~ of copper and \$375,000 in gold at \$20.67 per ounce. 16 The oxidized zone yielded \$300,000 in gold. 17 Ballard and Clayton, 1948, 9 p.; Genth and Kerr, 1881, p. 96; References: 18 Laney, 1910, p. 107; 19 Nitze and Hanna, 1896, p. 88; 20-Pardee and Park, 1948, p. 87,7 21 Stuckey, 1965, g. 291-292. 22 23 24

Hunt mine 1 Type: Gold 2 Location: Davidson County, 2 1/2 miles southwest of Silver Hill. 3 Continuous with the Peters and Cross mines and between them. 4 5 --A quartz vein occurs in sericite schist. A line of old workings was seen in 1934, including a 30-foot shaft and 2 pits. 7 8 References: C. B. Brown, 1934, written communication; Pogue, 1910, p. 10-11 Hunter (Dr. Hunter) mines Type: Gold 2 Location: Mecklenburg County,  $5\frac{1}{2}$  miles southeast of Charlotte, near Sardis church. 5-Gold and silver were noted in the ores. There were two well-6 known veins, and outcroppings of several others. There is no record of the amount of work done at this mine. References: Kerr and Hanna, 1887, p. 301; 10-Nitze and Hanna, 1896, p. 143; 11 Pardee and Park, 1948, p. 63. 12 24 25

1 Hunter, A.H., mine 2 Type: Gold Location: Mecklenburg County, at Huntersville, 16 miles north of 3 Charlotte, 5-A vein carrying gold and pyrite with a promising exposure was 6 explored to a depth of 23 feet. 7 8 References: Genth and Kerr, 1881, p. 111; Kerr and Hanna, 1888, p. 303. 10-11 Hunter John P., (Elwood) mine 1 Type: Gold Location: Mecklenburg County, 4 miles northeast of Charlotte, and 1 to 2 miles southwest of the Henderson mine. 5-One of 5 veins indicated by outcrops and float ore was 6 prospected to a depth of 25 feet. The Elwood vein, 3/4 mile 7 to the west, was opened before the Civil War by several shallow pits and shafts. 10-References; J.V. Lewis, 1934, written communication; 11 Nitze and Hanna, 1896, p. 142; 12 13 Pardee and Park, 1948, p. 63.

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Hunter, S.H., mine
 1
       Type: Gold
3
       Iocation: Mecklenburg County.
      Reference: Pardee and Park, 1948, p. 63.
 5-
 1
    Hunts Mountain mine
2
     Type: Gold
3
    Location: Burke County.
4
    Reference: Pardee and Park, 1948, p. 62.
.13
     Hunt's Mountain (Huntsville) mine
 1
     Type: Gold
 2
     Location: McDowell County, the northern end of the Vein Mountain
         Mine tract of 6,800 acres extending up the valley of Second
4
 5--
          Broad River to Huntsville Mountain.
6
          See Vein Mountain mine for description of geology.
     References: Cameron, 1893, p. 308;
 10-
                  Kerr and Hanna, 1888, p. 314;
11
                  Pardee and Park, 1948, p. 63.
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IL S. GOVERNVEST OF 12

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Ida mine
 1
      Type: Gold
2
     Location: Davidson County, 1 1/4 miles northeast of the Silver Hill
3
           mine.
 5-
           A white bull quartz vein in sericite schist carried some pyrite.
6
     Pyrite also was disseminated through the schist.
7
     References: C. B. Brown, 1934, written communication;
                   Pogue, 1910, p. 108
 10-
11
12
     Idler mine
          See Alta mine, Rutherford County (
2
16
17
      Ingram mine
           See_Crawford mine, Stanly County
 20-
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6

1

2 25Iola mine

Type: Gold

Location: Montgomery County, 2 miles northwest of Candor.

The lode is at the eastern margin of the volcanic series and passes under a cover of later sediments which conceals the outcrop. The ore occurs in quartz veins, lenses, and stringers, and as pyritic mineralized zones in schist, striking N.55°E and dipping  $45^{\circ}$  to  $50^{\circ}$  NW. One ore shoot was 100 to 150 feet long and 350 feet deep. In one place along the lode a vein of sugary white quartz 8 feet wide assayed \$30 per ton in gold. The ore averaged 1.50 ounces per ton of gold. The lode was traced to the northeast through the Martha Washington and Montgomery (Uwarra) mines.

The mine was discovered in 1900 and named in honor of the lady who financed the early efforts of the mine and who bore the euphonious name of Iola Oyster. The mine was owned by the Iola Mining and Milling Company through 1910 and produced nearly a half million dollars.

The early success of the Iola mine gave rise to a mild boom in the Candor district, which resulted in the discovery of other veins and the opening of several other mines including the Montgomery (Uwarra), Martha Washington, Golconda, and Curry.

In 1907 was opened by a 320-foot shaft with many levels and a The old Iola mill 170 foot inclined shalf.

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was destroyed by fire in 1910. A new mill, owned by the Candor Mines
 7
      Company, of Candor, N.W., was built in 1911 and operated through 1915.
      This mill used the "all-sliming" process and had the distinction of
      having the heaviest stamps in the United States. In 1912 the mine
 10-
      shipped 40 to 50 pounds of gold bullion semi-monthly to the mint,
11
      and was the largest gold producer east of the Black Hills. During
12
      the years of its operation, from 1902 through 1915 it is estimated
13
      that the Iola mine produced $900,000. Some vevelopment work was
14
      done in the 1930's but the results were not favorable.
 15-
16
      References: Bryson, 1936, p. 31-37; 77;
17
                   Bryson, 1937, p. 25;
18
                   Lyon, E. W., 1909, p. 295;
19
                   Pardee and Park, 1948, 82-83;
 20-
                   Pratt, 1904, p. 14-15;
21
                   Pratt, 1907, p. 50-51;
                   Pratt, 1914, p. 22, 26-38.
23
18
19
     Isaac Allen mine
 1
      Type: Gold
 2
               Davie County, one mile northwest of Moksville. -
     Location:
 3
     References: Kerr and Hanna, 1888, p. 307;
                   Nitze and Hanna, 1896, p. 151.
```

Isenhour mine Group, Cabarrus County 1 2 Type: Gold, silver Location: Cabarrus County, several hundred yards S.33°W, from the 3 Mauney mine. The mine was worked to a small extent in the 1890's. 6 7 Reference: Nitze and Hanna, 1896, p. 91. 8 Isenhour (Yellow Dog) mine 1 Type: Gold 2 Location: Mecklenburg County, at the southern end of the Rudisil 3 lead, at the east end of Atherton St., 2 miles south of the "square" in Charlotte. 5~ A 4-foot wide vein of honeycombed quartz occurs in feldspathic 7 granite and black, micaceous slate. In 1906 an old caved shaft was 8 reopened to a depth of 170 feet by Mr. Max Jasspon. A 5-stamp mill was operated for a short time by the Yellow Dog Company in 1906 and 10between 300 and 350 tons of ore were milled. 11 12 References: J. V. Lewis, 1934, written communication; 13 Kerr and Hanna, 1888, p. 293; Pardee and Park, 1948, p. 63: 15-Pratt, 1907, p. 68-69. 16

```
Island Creek mine
 1
             Go1d
       Type:
 2
       Location: Montgomery County, on the west flank of the Uharie
 3
            the southside of Big approximately oil mile east of the junctions Mountains, on Island Creek,
             of Big Island Creek with the fee Dee Rever.
  5 --
            This was a placer mine in gravel underlying saprolite.
 6
       was hindered by the scarcity of water and by the tenacious nature of
 7
       the saprolite.
       References:
                     Bryson, 1936, p. 78;
  10-
                     Conley, 1962, p. 18;
11
                     Kerr and Hanna, 1888, p. 248;
12
                     Nitze and Hanna, 1896, p. 80;
, 13
                     Nitze and Wilkens, 1897, p. 52;
14
                     Pardee and Park, 1948, p. 63.
  15-
16
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Jacks Hill mine
1
     Type: Gold, copper <
2
     Location: Guilford County, about 1/3 mile north of the North State
3
          mine. —
 5 -
          This mine is on the same northeast-southwest trending quartz
6
     vein as the North State mine. The vein is described under that mine.
7
     The mine was opened before the Civil War and was developed by a
8
     77-foot inclined shaft which cut a 17-foot vein.
 10-
     References:
                 C. B. Brown, 1934, written communication;
11
                   Emmons, 1856, p. 171;
12
                   Kerr and Hanna, 1888, p. 207;
13
                   Nitze and Hanna, 1896, p. 115;
14
                   Nitze and Wilkens, 1897, p. 46;
 15-
                   Pardee and Park, 1948, p. 76.
16
      Jackson mine
 1
      Type: Gold
2
      Location: Moore County, 7 miles northeast of Carter.
3
      Reference: Pardee and Park, 1948, p. 64.
 5 --
23
24
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i 4

1 Jake open cut 2 Type: Tin Location: Lincoln County, part of the Ka-Mi-tin mine 3 Cassiterite occurs in greisen gangue in muscovite schist and 5gneiss. The ore body is 6 inches thick and 10 feet long and is conformable with the wall rocks. 7 8 Reference : Kestler, 1942, table 18. 9 10~ Jankins mine 1 See Dry Hollow mine, Moore County 2 13 Jenkins Farm, Stroup, and Rayfield prospects Type: Tin 2 Location: Gaston County, about 1/2 mile southwest of the Hastings prospect, and 2-1/2 miles S. 60° W. of Landers Chapel. 5 -Cassiterite in greisen gangue and in pegmatite was found in muscovite schist and gneiss and hornblende gneiss country rock. Five ore bodies were located within a radius of 800 feet in the vicinity of the Jenkins farm. This location is very near the prospect pits opened in 1904 on the boundary line between the properties of 11 Nora Rayfield and John Stroup. 12 13 References: Keith and Sterrett, 1918, p. 145;

Kesler, 1942, table 18.

```
1
       Johnson mine
2
       Type: Gold
       Location: Mecklenburg County, near the Cabarrus County line and
3
            Pioneer Mills.
            The ore carries gold and pyrite. This is one of the Pioneer
      Mills group of mines and it is similar to that mine.
7
      References: Genth and Kerr, 1881, p. 111;
                    Kerr and Hanna, 1888, p. 302;
 10~
11
                    Nitze and Hanna, 1896, p. 144;
                    Pardee and Park, 1948, p. 63.
12
13
     Johnson mine
1
           See Porter mine, Randolph County
2
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 20-
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Jones mine 1 Type: Tin 2 Location: Gaston County, 7 miles northeast of Kings Mountain and 3  $3\frac{1}{2}$  miles N.  $30^{\circ}$  W. of Bessemer City, on the John E. Jones plantation. 5-Cassiterite occurs in feldspathic gangue in pegmatite and in greisen gangue in hornblende gneiss country rock. A few shallow pits were made in 1892 and 1893. In 1903 development work was begun by the Carolinas Tin and Development Co., which sold the 10-property to the Carolina Tin Co. in 1904. By 1906 there was a 11 175-foot vertical shaft with 500 feet of underground workings and 12 a concentrating mill. Two pegmatite dikes 100 yards apart were 13 explored. 14 15-Graton, 1906, p. 46-48; References: 16 Keith and Sterrett, 1918, p. 144-145; 17 Kesler, 1942, table 18; 18 Pratt, 1907, p. 20; 19 Pratt and Sterrett, 1904, p. 29-30, 20-Stuckey, 1965, p. 335. 21 22 23 24 25-

Jones (H and G, Asheboro, County Home) Mine 1 2 Gold Type: 3 Randolph County, 2 to  $2\frac{1}{2}$  miles south of Asheboro — Location: Placer material consisting of decomposed 5ferruginous sericite schist derived from fine acid tuff is impregnated with sulfides and free gold for a 7 depth of 2 to 4 feet below the surface. Below this the ore is in a vein about 20 feet wide in schist. In 9 the 1890's placer mining was done and several pits and 10shafts were put down. A 10-stamp mill treated the ore. 11 The mine was worked again in about 1910. In 1936 12 E. B. Hendricks (Hedrick?) and H. L. Griswald of 13 Asheboro erected a washing plant of 10 tons capacity, 14 operating or one from the vein, which averaged about 15-\$5 per ton in gold. 16 17 References: C. B. Brown, 1934, written communication; 18 Bryson, 1937, p. 21; 19 Pardee and Park, 1948, p. 64. 20~ Jones mine Type: Gold 2 Location: Rutherford County, 1 3 Reference: Pardee and Park, 1948, p. 65. 16

Jones-Boy Scout Mine

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Location:

Type:

Molybdenum

Hali ax County, 2 miles south of Brinkleyville on

N. C. Highway 48, then west on a paved road for 1.1

miles, then north to the end of a dead-end secondary

county road for 0.8 mile.

Molybdenum occurs associated with a small granite body about 2 miles long and is most highly concentrated in a series of northwest-trending quartz veins in the granite, although minor amounts are present in northeasttrending veins in the adjacent schist. Molybdenite is associated with pyrite, chalcopyrite, and sericite. The sulfides have been leached out of the quartz adjacent to cracks and fissures from the surface to a depth of 1 to 2 feet; molybdite has been deposited along the cracks, and secondary chalcocite and covellite are found coating pyrite. Small amounts of rhenium were found in the ore. The deposit was discovered in 1935 and during the next few years the veins were prospected by trenches. pits, and a 30-foot shaft. In 1943, 1944, and 1946 the U. S. Bureau of Mines explored the deposits by trenching and drilling, and estimated that the deposits contained 549,300 tons of inferred ore of 0.45 percent There has been no record of production.

24

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1
                      Broadhurst, 1955, p. 23-24;
        References:
  2
                      Conley, 1958, p. 35;
  3
                      Hafer, 1942, p. 83;
                      Julihn and Moon, 1945, p. 32;
                      Koschmann, 1943, p. 1-10;
                      Murdock, 1950, p. 15-16;
  7
                      Robertson, McIntosh, and Ballard, 1947, p. 9
  8
                       Stuckey, 1965, p. 326-327.
  10-
. 11
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Jones-Keystone mine

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Type: Gold

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Location: Randolph County, 18 miles east-southeast from Lexington and

12 miles south-southeast from Thomasville, or 12 miles west of

Asheboro, on the west side of the Uharie River, opposite the

Hoover Hill mine.

The country rock is a brecciated porphyritic schist derived from tuffs of the volcanic series, more or less altered to saprolite. Silicified and iron-rich zones of decomposed rock containing pyrite constitute the ore body, and gold is more or less distributed throughout the decomposed rock, but is more richly concentrated in belts. Two of these gold-bearing belts are described as being 50-feet and 110-feet wide respectively. A grab sample of the ore taken in 1934 assayed 0.04 ounce of gold per ton. Some specimens of ore are composed largely of pyrophyllite. The ore body was described by Emmons in 1856 as"a mass of soft reddish talcose slate" through which gold was disseminated.

The principal workings are two large open-pits and several shafts of unknown depth. In 1852 the mine was in active operation and was equipped with a 40-stamp mill, probably one of the first in North Carolina. The recovery was said to be very low because much of the gold was exceedingly fine. The mine was closed during the Civil War, but was reopened in the late 1870's and operated for short periods in 1880, 1884, 1894, 1895, 1896, and 1903. In 1896 the

40-stamp mill from the Coggins mine in Montgomery County was moved 1 to the Jones mine. Between 30,000 and 40,000 tons of material hap 2 been removed from the pits. If all of this material was milled the 3 total production was about 5,000 of gold. As depth was reached and sulfides were encountered, the value of the ore apparently decreased, 5 -and the mine was abandoned. Bryson reported that around 1936 the 6 mine was operated by the Keystone Mining Company on ore averaging \$3.00 per ton. At that time a 200-ton mill was grected on the 8 property and several hundred tons of ore were treated. 9 10-References: C. B. Brown, 1934, written communication; 11 Bryson, 1936, p. 69-70; 12 Bryson, 1957, p. 21; 13 Emmons, 1956, p. 131-132; 14 Kerr and Hanna, 1888, p. 254-256; 15-Nitze and Hanna, 1896, p. 57-29; 16 Nitze and Wilkens, 1897, p. 47, 53; 17 Pardee and Park, 1948, p. 86-88. 18 19 20-21 22 23 24

```
1
       Jordan mine
       Type: Gold
2
3
       Location: Mecklenburg County.
       References: Genth and Kerr, 1881, p. 111;
 5-
                    Pardee and Park, 1948, p. 63.
7
8
       Juggernaut mine
1
       Type: Gold
2
       Location: Mecklenburg County, 7-3/4 miles west of Charlotte.
3
            Gold and pyrite were noted in the ore.
 5--
6
       References: Genth and Kerr, 1881, p. 111;
7
8
                    Pardee and Park, 1948, p. 63.
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## Ka-Mi-Tin mine

2 Type: Tin

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10-

Location: Lincoln County, starting about 2 1/2 miles southeast of Lincolnton and extending for about 2 1/2 miles southwest to the South Fork

River.

Cassiterite occurs in numerous small tabular and lenticular ore bodies in feldspathic pegmatite and greisen gangue in muscovite schist and

gneiss and hornblende gneiss country rocks.

In 1905 the Piedmont Tin Mining Company began developing the deposits in the area southeast of Lincolnton, concentrating mainly on the main shaft mine to the north, where two shafts, 102 feet and 40 feet deep, were sunk, with 1,319 feet of under ground workings, and the Henry shaft mine, one mile southwest of the Main Shaft mine, where a 60-foot shaft was sunk. No substantial amount of ore was developed during these operations. In 1932 the properties were owned by the American Consolidated Tin Mines Corp., and in 1935-1937 and 1942 the property was developed by the Ka-Mi-Tin Concentration Corp. the production, if any, was small.

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The names of the openings and shafts included in the two-mile
1
     stretch of property are from northeast to southwest:
2
          Carpenter Shaft
3
          Copperhead Shaft
          Reep Shaft
 5-
          Jake Shaft
          Main Shaft
7
          Condon Shaft
          Swamp Shaft #1
9
          Henry Shaft
 10-
          J. Mostellar Shaft
11
          Old Well Shaft
          Upper Mostellar Shaft
13
          J. E. Gates Shaft
14
     Most of these are described separately.
 15-
16
     References: Kessler, 1942, 245-269;
17
                  Pratt, 1907, p. 20-22.
18
10
      Kearney mine
 1
      Type: Gold
2
                 Halifax County, near the Portis mine;
3
      References: Bryson, 1936, p. 63;
 5 ---
                   Kerr and Hanna, 1888, p. 241;
6
                   Nitze and Hanna, 1896, p. 27;
7
                   Nitze and Wilkens, 1897, p. 43.
8
```

Kerns or Kearns mine 1 See Hopewell mine, Mecklenburg County. 2 3 Kimball Hill mine 1 Type: Gold 2 Location: Stanly County, 2 miles northeast of New London, northeast 3 of Bethel Church on Tanyard Branch, and less than 1 mile east of the Crowell Mine. 5-6 A quartz vein, 4 to 6 inches wide, carried coarse gold in pockets. 7 The mine is said to have been worked before in andesite country rock, 8 the Civil War. W. L. Cotton operated the mine in 1910, and the Lowder Brothers worked it in 1933. The workings include 3 shafts 10and a 60-foot tunnel. 11 12 References: C. B. Brown, 1934, written communication; 13 Pardee and Park, 1948, p. 97. 18 Kindley mine 1 See Parish mine, Randolph County 2 21 King's mine See Silver Hill mine, Davidson County. 2 25

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Kings Mountain mine
1
     Type: Tin
2
     Location: Cleveland County, about 1/2 mile north of the town of Kings
3
          Mountain.
 5--
          Cassiterite-bearing greisen occurs in muscovite and hornblende
6
     schist. In 1907 the Blue Ridge Tin Corporation sank 3 shafts ranging
7
     from 50 to 75 feet deep. Two of the shafts were 50 feet apart and near
8
     the railroad tracks. A mill was erected close by. The third shaft is
     about 150 feet west of the mill and is on a different "vein". In 1940
 10-
     float ore was found 450 feet S. 70° W. of the 75-foot shaft.
11
12
     References: Keith and Sterrett, 1917, p. 138;
13
                  Kesler, 1942, table 18;
14
                  Stuckey, 1965, p. 333-334.
 15--
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Kings Mountain (Catawba, Briggs) mine

Type: Gold, lead, zinc

Location: Gaston County, about 2 miles south pf the town of Kings Mountain.

Three cellular quartz veins ranging from 2 to 20 feet in width associated with beds or lenses of blue to gray banded dolomitic marble in chloritic mica schists carry gold with sparsely disseminated pyrite, pyrrhotite, chalcopyrite, arsenopyrite, galena, sphalerite, tetrahedrite, altaite, nagyagite, bismite, and bismutite. Saprolite on the surface carried considerable quantities of gold and placers have been worked over an area of a few acres along the branch below the mine.

The mine was discovered in 1820 or 1834 and was worked intermittently until 1895. Graton reported that the mine was opened in 1834 and worked for several years by a Mr. Briggs. Later, Commodore Stockton, a well-known figure in the gold-mining industry of the region, took over the mine.

Lieber reports that when a deep pump shaft was drilled and pumping began in the 1850's, workings at the Parker and Lee mines, 13 miles distant, were entirely drained, filling again when the pumps were stopped, and draining a second time when they were put in operation again. This was a remarkable coincidence which created some interest at the time, for the dip of the beds is such that there could be no connection. After the Civil War a 20-stamp mill was installed. Some prospecting and development work were done in 1910-1913 but the mine was not reopened. Twelve or more shafts were sunk during the 1996 of the mine; two were reported to be 330 feet deep and the others were from 50 to 200 feet deep. The three veins explored were known as the Front, Beckwith, and East veins. It is

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estimated that the mine produced from \$750,000 to \$1,000,000.

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References: Bryson, 1936, 127-128;
1
                  Graton, 1906, p. 94-96;
2
                  Keith and Sterrett, 1931, p. 8;
                  Kerr and Hanna, 1888, p. 304-306;
                  Lieber, 1858, p. 92;
 5--
                  Nitze and Hanna, 1896, p. 146-147;
                  Nitze and Wilkens, 1897, p. 67-68;
                  Pardee and Park, 1948, p. 74,
                  Stuckey, 1965, p. 307.
 10-
     Kings Mountain town prospects
1
            Tin
     Type:
2
     Location: Cleveland County, occurrences reported in the town of
3
          Kings Mountain, now hidden by buildings and pavement, include
     the property of O. W. Meyers, 112 N. Piedmont Ave. (formerly Captain
 5-
     Suggs place); near the Post Office; and a short distance south of
6
     the end of West Gold St.
7
    Reference: Kesler, 1942, table 18.
9
21
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King Solomon mine
1
       Type: Gold
2
       Location: Mecklenburg County, 2\frac{1}{2} miles northeast of Charlotte,
3
            between 27th and 28th streets and Pinckney and yadkin streets.
 5 --
            A quartz vein in sheared granite with iron oxides was seen.
6
       Two 40-foot shafts, caved in, and a small incline near the the
       bottom of a ravine were seen in 1934.
9
                     J.V. Lewis, 1934, written communication;
       References:
 10-
                     J.T. Pardee, 1934, written communication;
11
                     Pardee and Park, 1948, p. 63.
12
      Kirksey's mine
      Type: Lead
2
3
      Location: McDowell County.
           Tetradymite was noted in the ore.
 5-
6
      Reference: Genth and Kerr, 1881, p. 110.
      Kismet mine
            See Parish mine, Randolph County (
 2
 25
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Kistler mine 1 Type: Gold 2 Location: Rowan County, 8 to 10 miles east of Salisbury; 3 4 5--Reference: Kerr and Hanna, 1888, p. 282. 6 1 Kitchen prospect 2 Type: Copper Location: Graham County, in Sam Cove, about one mile up Deep Creek from the Cheoah River. 5-Disseminated pyrite and traces of chalcopyrite were found in 6 sandstone. A short adit and shaft were dug near the mouth of Sam Cove and another pit was dug 1,000 feet up the cove. 8 9 Reference: Espenshade, 1963, p. 36. 16 Kitchens prospect 1 Type: Copper 2 Location: Clay County, on the western slope of Kitchens Knob of 3 Pine Ridge, near the ridge crest above the headwaters of Licklog Branch, a tributary of Hiwassee River. 5 -Pyrrhotite, pyrite, and chalcopyrite occur disseminated in a 50-foot zone in quartz-biotite schist. Tennessee Valley Authority, 1942, written communication;

Hunter and Gildersleeve, 1946, p. 18.

1 Kizer, L. A. C., prospect 2 See Whitesides, J. W., prospect, Gaston County 3 Kizer- Mauny farm prospect 1 Type: Tin 2 Location: Gaston County, about 1/2 mile south of The Ormond-Carr 3 prospect. 5-Tin ore was reported, but none was seen at the time of inves-6 tigation. 7 8 Reference: Kesler, 1942, table 18. . 14 Klondyke mine 1 Type: Barite 2 Location: Madison County, approximately 1 1/4 miles northeast of 3 Stackhouse station. 4 5-7

A large vein of barite in a fauet zone in Max Patch granite was worked here to a depth of 350 feet. In the second level the vein was 13 feet thick, and at deeper levels it was 2 feet thick. High-grade barite was produced here between 1904 and 1916. Impurities include fluorite, pyrite, and galena.

Reference: Hunter and Gildersleeve, 1946, p. 9.

10-

11

Klutz (Kluttz) mine 1 Type: Gold 2 Location: Cabarrus County, 3 miles southwest of Gold Hill, south-3 west of the Isenhour mine. 5 --This unpromising prospect is classified as chalcorite and 6 bornite with little chalcopyrite or pyrite in greenstone country 7 rock, similar to the deposits at Virgilina. Shallow pits on land 8 belonging to George P. Kluttz. 10-11 References: Ianey, 1910, p. 112-113; Pardee and Park, 1948, p. 62. 12 Laffing mine See Loftin mine, Davidson County ( 2 3 17 18 19 20--21 22 3 24 25

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Laffin (Laughlin, Herring) mine
1
      Type: Gold
2
      Location: Randolph County, 2 1/2 miles northwest of Jackson Creek,
      and 4 1/2 miles east of Cid, on Kery Hill.
 5-
           The ore is in 2 belts about 200 feet wide and ½ mile long in
      saprolite derived from talcose and argillaceous slates. The ore-
      bearing material is said to resemble an impure porcelain clay mass to
      a depth 40 or 50 feet. Open cuts revealed stringers of bull quartz.
      The mine was worked in the 1850's and was opened by open cuts and
 10-
      tunnels. In 1906 the mine was owned by the Empire Mining Co.
11
12
                   Emmons, 1856, p. 132.
      References:
13
                   Kerr and Hanna, 1888, p. 254;
14
                   Nitze and Hanna, 1896, p. 59;
 15-
                   Nitze and Wilkens, 1897, p. 47;
16
                   Pardee and Park, 1948, p. 64;
17
                   Pratt, 1907, p. 22-24; 41-42.
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Lalor (Allen) mine
1
     Type: Gold, copper
2
     Location: Davidson County, 2 miles southeast of Thomasville.
3
           Gold, pyrite, chalcopyrite, arseno pyrite, and tetradymite are
 5-
     reported in highly sheared altered greenstone schist country rock,
     in which chlorite, talc, apkerite, and quartz are developed.
7
     mine was operated from 1882 to 1886 by the Campbell Mining and
      Reduction Company of New York, and comprised 3 shafts, the deepest
      of which was 165 feet, a 10-stamp mill, and a roasting furnace.
 10-
      1934 pits and shallow shafts extending for 450 feet in a northeasterly
11
     direction were seen.
12
13
      References: C. B. Brown, 1934, written communication;
14
                   Kerr and Hanna, 1888, p. 279;
 15-
                   Genth and Kerr, 1881, p. 101;
16
                   Nitze and Hanna, 1896, p. 116;
17
                   Pardee and Park, 1948, p. 62.
18
19
      Latta mine
 1
      Type: Barite
      Location: Orange County, near Hillsboro.
 3
      Reference: Genth, 1891, p. 81.
  5 --
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Laufman mine
 1
       Type: Gold
 2
       Location: Moore County,
 3
       Reference: Pardee and Park, 1948, p. 64.
  5 --
      Laughlin mine
 1
      Type: Gold
 2
      Location: Davidson County,
 3
           Gold, pyrite, limonite, and hematite were noted in the ore.
  5-
      Reference: Genth and Kerr, 1881, p. 101.
 7
13
       Laughlin mine
 1
             See Lafflin mine, Randolph County
 2
16
      Laughlin, John mine
 1
      Type: Gold
, 2
      Location: Randolph County, 9 miles northeast of Asheboro.
 3
           Some sulfides, chiefly pyrite, were seen in silicified quartzose
  5-
      chloritic schist probably derived from andesitic tuff. Two open pits
 6
      were seen in 1934.
 7
 8
      References: C. B. Brown, 1934, written communication;
                   Pardee and Park, 1948, p. 64.
 10-
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```
Laurel Hill mine
1
           See Cagle mine, Moore County
2
3
     Lawson mine
     See Howie mine, Union County. (
2
    Lawson Smart mine
    Type: Gold
2
    Location: Rutherford County, 1 mile north of the grayson mine.
          This was a placer mine in gravel.
 5-
    Reference: Kerr and Hanna, 1888, p. 312.
 15-
16
     Lawton mine
1
     Type: Lead-zinc
2
     Location: Gaston County, .
3
     Reference: Murdock, 1950, p. 12.
 5-
22
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1 Ledoux prospects Tin Type: 2 Location: Cleveland County, about 1/4 mile southwest of the Plank prospect, 2,000 feet S. 55° E., to 2,825 feet S. 10° E. of the Park Yarn mill. 5-Cassiterite occurs in greisen and feldspathic gangue in pegmatite dikes in muscovite schist and gneiss and hornblende gneiss country 8 rocks. Chalcopyrite and arsenopyrite were found associated with the 9 cassiterite at the bottom of one shaft. Six ore bodies along the 10-11 ridge were prospected by Ledoux & Co. in 1888-1889, and later by the Blue Ridge Tin Corporation. Exploration included trenching, drilling, 12 and the sinking of an 85-foot and a 60-foot shaft. A mill was erected 13 at the mine in 1905. 14 15-References: Keith and Sterrett, 1917, p. 140; 16 Kesler, 1942, table 18; 17 Pratt, 1907, p. 19; 18 Pratt and Sterrett, 1904, p. 24-25. 19 20-21 22 24 25

16

```
1
     Leeds mine
2
     Type: Gold
3
     Location: Rutherford County, 100 feet north of the Ellwood mine.
       A quartz vein carrying gold and parallel to the veins at the
 5-
     Ellwood mine. The mine was abandoned and inaccessible when seen in
7
     1892.
9
     References: Bryson, 1936, p. 142;
 10-
                  Nitze and Hanna, 1896, p. 170.
11
      Lemmonds (Marion, Lemons) mine
 1
      Type: Gold
2
      Location: Union County, a southern extension of the Stewart mine.
3
           A quartz vein from a few inches to 6 feet in width carrying
  5-
      galena, brown sphalerite, arsenopyrite, chalcopyrite, and
6
      pyromorphite with gold and silver, is in sericitic phyllite country
 7
      rock. The mine was worked in the 1880's and 1890's.
 9
                   Brown, C. B., 1934, written communication;
      References:
 10-
                Bryson, 1936, p. 93;
11
                   Genth and Kerr, 1881, p. 118;
12
                   Kerr and Hanna, 1888, p. 189-190;
13
                   Nitze and Hanna, 1896, p. 97;
                   Pardee and Park, 1948, p. 65;
 15-
```

Shepard, 1853, p. 595.

1 Lewis mine Type: Gold 2 Location: Union County, northeast of the Phifer mine, about  $4\frac{1}{2}$  miles 3 southwest of Indian Trail and  $2\frac{1}{2}$  miles northeast of Wesley Chapel in the Moore Hill group of mines. 5-6 The ores are described under the Moore Hill mine. This mine was 7 worked for a length of nearly 1,000 feet and to a depth of 80 feet in the 1800's. The Peacock Mining Co. prospected the Lewis mine in 1934, and sank two shafts, the Peacock and Cow, to a depth of 65 feet 10in quartz sericite schist and sericitic phyllite containing seams of 11 pyrite-and gold-bearing granular quartz#. 12 13 References: Brown, C. B., 1934, written communication; 14 Bryson, 1936, p. 96; 15-Kerr and Hanna, 1887, p. 262-263; 16 Nitze and Hanna, 1896, p. 103; 17 Pardee and Park, 1948, p. 101-102. 18 Liberty Mining Confine 1 Type: Gold 2 Location: Davidson County, 2 1/2 miles north of Silver Hill. 3 The mine was operated from 1929 to 1935 by the Liberty Mining 5-Corp. 6 7 References: Bryson, 1937, p. 27; 8 Pardee and Park, 1948, p. 62.

```
1
     Lick Ridge mine
     Type: Copper
2
     Location: Mitchell County, _
3
          Pyrite, chalcopyrite, muscovite, albite, garnet, and biotite were
 5--
     noted.
7
     Reference: Genth and Kerr, 1881, p. 111.
8
     Lilian mine
     Type: Gold
2
3
     Location: Polk County.
          This mine was listed as a principal gold and silver producting
 5--
     mine in North Carolina in 1903 and 1904.
7
     Reference: Pratt, 1905, p. 13.
9
19
 20-
21
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U. S. GOVERNOUS "

Lindsay mine 1 Type: Gold, copper Location: Guilford County, southwest of the North State mine, about 3  $2\frac{1}{2}$  miles southwest of Jamestown. 5 --This mine is the southwestern extension of the North State mine. It is in the same quartz vein in granite. The vein is described under 7 the North State mine. The mine was opened before the Civil War and 8 was developed for a length of about 2 miles by the South shaft No. 2, 100 feet deep; South shaft No. 1, 90 feet deep; Engine shaft, 150 10feet vertical and 60 feet on the incline, and Willows shaft, 110 feet 11 deep. A series of 87 assays taken from all sections of the mine 12 ranged from \$4 to \$100 per ton. The mine was prospected in 1931 by . 13 J. A. Allred, but no work was done. 14 15-C. B. Brown, 1934, written communication; 16 Bryson, 1936, p. 108; 17 Emmons, 1856, p. 173-174; Kerr and Hanna, 1888, p. 278; 19 Nitze and Hanna, 1896, p. 115, 116; 20-Nitze and Wilkens, 1897, p. 46; 21 Pardee and Park, 1948, p. 76. 22 23 25

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Lindsay's, W., mine
1
     Type: Copper
2
     Location: Rockingham County, at Madison.
3
          Chalcopyrite was noted.
 5-
     Reference: Genth and Kerr, 1881, p. 116.
7
8
     Lineberger mine
1
     Type: Gold
     Location: Gaston County, 4 miles southeast of Gastonia.
3
     Reference: Pardee and Park, 1948, p. 62.
i4
 15-
    Linker mine
     Type: Gold
2
     Location: Cabarrus County.
3
     Reference: Pardee and Park, 1948, p. 62.
 5-
21
23
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U. S. GOVERNIES

Linville Caverys prospect Type: Zinc 2 Location: McDowell County, about 1/2 mile north of Linville Caverys. 5-Disseminated sphalerite, cuprite, chalcopyrite, pyrite, and secondary copper minerals are found associated with quartz and 7 calcite in veinlets and irregular replacements in Shady Dolomite of the Tablerock thrust sheet. One small prospect trench was opened on the hillside, and 4 holes were diamond drilled in 1943-44. 10-11 Bryant and Reed, 1966, p. 7-8; Reed, 1964, p. 44. 12 13 Litaker mine 1 Type: Gold 2 Location: Cabarrus County, near Concord. Reference: Pardee and Park, 1948, p. 62. 19 Little Bald prospect 1 Type: Copper 2 Location: Cherokee County, one mile east of the Beaverdam Bald project. 3 Gossan similar to that at the Beaverdam Bald prospect is exposed. 5 --G. H. Espenshade, 1943, written communication. Reference: 7

```
Little Fritz (Culp) mine
       Type: Gold
       Location: Stanly County, near Gladstone, .
3
            Prospecting was done in the 1890's and an Elspass frictional
 5 --
       roller quartz mill was erected.
6
7
       Reference: Nitze and Wilkens, 1897, p. 56.
      Little Hungry River prospect
 1
         see Pardo mine, Henderson County
12
    Little John mine
     Type: Gold
     Location: Caldwell County.
          Gold and galena were noted in the ore.
  5-
    Reference: Genth and Kerr, 1881, p. 96.
 7
21
      Little Tennéssee mine
 1
      See Otto mine, Macon County
 2
24
 25-
```

```
1
      Locust Gap prospect
2
                   Copper
      Type:
                   Swain County, about 1\frac{1}{2} miles N. 50° E. of the
      Location:
                   Calhoun prospect.
 5-
                         Chalcopyrite and native copper were found by
                   G. I. Calhoun many years ago. In 1943, sandstone with
                    disseminated pyrite was observed, but there were no
                    signs of copper or gossan.
 10-
                    Espenshade, 1963, p. 36.
      Reference:
11
12
13
     Loftin (Laftin, Laffing) mine
1
     Type: Gold
2
    Location: Davidson County, 1 1/2 miles southeast of Thomasville.
3
          This mine is similar to the Lalor mine.
 5-
    References: Kerr and Hanna, 1888, p. 279;
7
                  Nitze and Hanna, 1896, p. 117.
22
23
24
 25
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```
1
      Long mine
      Type: Gold
2
      Location: Cabarrus County, 2 miles northwest of the Pioneer Mills
3
           mine.
 5-
           A nearly vertical vein, two feet wide, carries gold, pyrite,
      chalcopyrite, and galena.
7
 8
      References: Emmons, 1856, p. 181;
 9
                    Genth and Kerr, 1881, p. 96.
 10-
      Long mine
1
2
      Type: Gold
      Location: Union County, 3/4 mile southeast of the Crowell mine and
3
           2 miles southwest of Brief.
4
 5-
           Quartz veins in line with the easternmost Crowell vein carry
6
      gold and silver with pyrite, galena, sphalerite, and chalcopyrite,
7
      in a gangue of schistose matter, quartz, calcite, and siderite.
8
      The thickness of the vein varies from 30 inches to 4 feet. In 1934
9
      shafts and pits were found on two hills about 350 feet apart.
 10-
11
      References: Brown, C. B., 1934, written communication;
12
                   Bryson, 1936, p. 92;
13
                   Kerr and Hanna, 1888, p. 263;
14
                   Nitze and Hanna, 1896, p. 95;
 15--
                   Nitze and Wilkens, 1897, p. 63;
16
                   Pardee and Park, 1948, p. 103.
```

## Long Creek mine

Type: Gold

1

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12

13

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15-

wad.

Location: Gaston County, 8 miles northwest of Gastonia, and 6 miles northwest of Dallas.

Three quartz veins known as the Asbury, Dixon, and McCarter Hill 7 veins, trend northeastward and are conformable to the schistosity of the enclosing country rock. The Asbury vein had rich ore shoots composed of pyrite, chalcopyrite, galena, sphalerite, and arsenopyrite. 10-Native silver, tetradymite, pyrrhotite, leucopyrite, bismite, scorodite, montanite, cerussite, and bismutite have also been reported from the Asbury vein. Ore taken from the Asbury vien in the 1850's was thickly encrusted with mamillary masses of asbolite or cobaltian

The Asbury vein has been opened by 2 shafts 45 feet apart and worked to a depth of 140 feet. It was reported in 1859 that the deeper Bronson shaft cut quartz and pyrrhotite ore. The Dixon vein has been worked along the surface for 300 feet by pits and 2 shallow shafts. Three shafts explored the McCarter Hill vein to a depth of 160 feet for a distance of 250 feet. The last work here was in 1892. Some of the workings were unwatered and sampled in 1934 by the American Smelting and Refining Company.

23

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1
      References: Bryson, 1936, p. 129-130;
2
                   Genth and Kerr, 1881, p. 102;
3
                   Kerr and Hanna, 1888, p. 304, 347;
                   Nitze and Hanna, 1896, p. 149;
 5-
                   Nitze and Wilkens, 1897, p. 66-67;
                   Pardee and Park, 1948, p. 62, 74;
7
                   Pratt, 1907, p. 18;
                   Stuckey, 1965, p. 278,
Wurtz, 1859, p. 30.
8
      Long Mountain mines
 1
      Type: Barite
2
      Location: Madison County, on the southeastern spur of Long Mountain,
3
           about 1/2 mile north-northeast of Bluff.
 5-
           The deposits occur as fissure veins in broken and mylonitized
7
      Snowbird Quartzite a few hundred feet north of the outcrop of the
      Bushy Mountain thrust fault. Coarsely crystalline vitreous barite
8
      and sacchdroidal barite occur in alternating bands with black and
 10-
      purple fluorite. The mines were worked by the Rollins Chemical Corp.
11
      to depths of 200 feet in veins 6 feet thick.
12
```

Reference: Orie1, 1950, p. 52.

1

13

## Laudermilk mine

2

Type: Copper

3

Location: Jackson County, on the Cullowhee vein,

4

Reference: Weed, 1911, p. 137.

```
Love mine
 1
 2
      Type: Gold
      Location: Cabarrus County, near the Phoenix mine.
3
                                         were
           Gold, pyrite, and chalcopyrite noted in the ore.
 5-
      Reference: Genth and Kerr, 1881, p. 96.
 7
 8
      Lovedahl prospect
      see Phillips prospect, Jackson County(
 2
11
      Lowder mine
 1
      Type: Gold
2
      Location: Stanl by County, 22 miles northwest of Albemarle, adjoining
 3
      and northeast of the Haithcock mine.
  5-
           The country rock is a greenish chloritic schist derived from a
 6
      basic volcanic rock cut by a quartz vein 3½ feet thick conformable
 7
      with the schistosity. The veins carry free gold. This mine was
 8
      opened in 1835, and was operated up until the Civil War along the
 9
      outcrop and to a depth of 65 feet. In 1895 the mine was unwatered
 10-
      and prospecting was done.
11
12
      References: Kerr and Hanna, 1888, p. 258;
13
                   Nitze and Hanna, 1896, p. 82;
14
                   Nitze and Wilkens, 1897, p. 54;
 15--
```

Pardee and Park, 1948, p. 93.

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1
     Lowdermilk (McAdoo) mine
     Type: Gold
3
     Location: Randolph County, 7 miles south of Asheboro.
        Saprolite overlying slaty siliceous tuff was worked for gold by
     Mr. McAddo, using a log washer. Two shafts, 20 and 25 feet deep, were
     seen in 1934.
     References: C. B. Brown, 1934, written communcation;
 10 -
                  Pardee and Park, 1948, p. 64.
ì
   Ludowick mine
    Type: Gold
   Location: Cabarrus County, about 11 or 12 miles from Gold Hill.
        The ore carries chalcopyrite, argentiferous tetrahedrite, arsenic,
6
   and antimony in two quartz veins.
7
   References: Emmons, 1856, p. 202-203;
                 Kerr and Hanna, 1888, p. 208,347.
10-
.11
     Lytton mine
1
           See Delft mine, Randolph County
2
```

```
McAden mine
1
    Type: Gold
2
    Location; Alamance County,
3
         Gold and pyrite were noted.
 5 --
6
    Reference: Genth and Kerr, 1881, p. 91.
7
     McAdoo mine
1
            See_Lowdermilk mine, Randolph County (
2
     McAllister mine
1
           See Davis Mountain mine, Randolph County
2
1
     McCall mine
      See Hoover, Jas., mine, Mecklenburg County.
    McClarty mine
1
    Type: Gold
    Location: Union County, 2 miles northeast of Waxhaw.
3
    Reference: Pardee and Park, 1948, p. 65.
 5--
       McCleary (McLeary, Williams) mine
 1
       Type: Gold, copper
 2
       Location: Mecklenburg County, 1\frac{1}{2} miles southeast of Paw Creek.
            This mine was noted for the copper content of its ore.
 5 --
       References: Kerr and Hanna, 1888, p. 208;
                    Pardee and Park, 1948, p. 63.
```

```
1
      McClurd mine
      Type: Gold
2
      Location: Gaston County, 3 miles southeast of Stanley.
      Reference: Pardee and Park, 1948, p. 62.
 5-
6
7
 1
      McClure mine
      See Sumner mine, Mecklenburg County. (
 2
 10-
     McClure prospect
1
2
     Type: Copper
     Location: Jackson County, northeast of the Wayehutta mine, about
          mile up Black Mountain Branch.
 5--
          The county rock is biotite-quartz gneiss. The rock on the dump
6
     is light colored fine-grained amphibolite, possibly formed by hydro-
     thermal solutions. No sulfide minerals were seen.
       There was a 15-foot shaft.
9
     Reference: G. H. Espenshade, 1944, written communication.
22
23
24
 25
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U. S. GOVERNMENT IN

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McCombs mine
1
      Type: Gold
2
      Location: Mecklenburg County, 5 miles northeast of Charlotte, or 1.3
3
           miles southeast of Derita, ^{\wp}_{\sim} 3/4 mile south of Derita Mineral
           Springs. The Garris vein of the Ferris mine is on the McCombs
 5-
           place, \frac{1}{2} mile N. 15°E. of the McCombs mine.
           Quartz veins carrying pyrite in a shear zone in granite were
8
      seen. Large dumps, several shafts, and many pits and open cuts
      extending along the shear zone were seen in 1934.
 10-
11
      References: J.V. Lewis, 1934, written communication;
12
                    J.T. Pardee, 1934, written communication;
13
                    Pardee and Park, 1948, p. 63.
14
     McCombs mine
 1
      See St. Catherine mine, Mecklenburg County.
 2
      McCord mine
1
      Type: Gold
2
      Location: Mecklenburg County, 6 miles northwest of Charlotte.
3
      Reference: Pardee and Park, 1948, p. 63.
 5 --
24
 25
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```
McCorkle mine
1
    Type: Gold
2
    Location: Catawba County, east of Newton,
         The mine was worked in 1895.
 5-
6
    Reference: Nitze and Hanna, 1896, p. 150.
7
     McCorkle mine
 1
      Type: Gold
 2
      Location: Mecklenburg County, 8 miles southwest of Charlotte.
 3
 4
  5--
           The ores were brown oxides and gold-bearing pyrite. The workings
      extended to a depth of 50 feet.
 7
      References: Genth and Kerr, 1881, p. 111;
 9
                   Nitze and Hanna, 1896, p. 141;
 10-
                   Pardee and Park, 1948, p. 63.
11
19
1
    McCubb mine
     Type: Gold
2
3
    Location: Catawba County.
    Reference: Pardee and Park, 1948, p. 62.
 25--
     McCullough mine
          See North State mine, Guilford County.
```

```
1
      McDonald mine
      Type: Gold
      Location: Mecklenburg County, 1 mile southeast of Paw Creek.
           A gold-bearing quartz vein had been worked to "a moderate depth"
      in 1887.
6
7
      References: Kerr and Hanna, 1888, p. 293;
8
                   Nitze and Hanna, 1896, p. 131;
                   Pardee and Park, 1948, p. 63.
10-
11
       McDonald mine
 1
             See Ritter mine, Moore County
14
     McGee mine
1
2
      Type: Gold
     Location: Mecklenburg County, 5-10 miles northwest of Charlotte.
 5-
     Reference: Pardee and Park, 1948, p. 63.
21
22
23
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U. S. GOVERNMENNE "

McGinn mine 1 Type: Gold 2 Location: Mecklenburg County, about 5 miles northwest of Charlotte and adjoining the Capps mine on the north. 5-A group of veins in the granite belt carry gold and copper. The Jane vein carries quartz, pyrite, and gold, and the McGinn 7 copper vein carries chalcopyrite, barnhardtite, cuprite, melaconite, and pseudomalachite. Cobalt and nickel minerals have occasionally been observed in the ore of the McGinn mine. Little is known of the 10history of this mine, but its development must have been similar to 11 that of the adjoining Capps mine. The dopper vein was opened to a 12 depth of 110 feet and was worked exclusively for copper in the 1840's. 13 Gold was mined from the Jane vein which was worked at several points 14 over a length of more than 1,000 feet and to a depth of 150 feet in 15the Engine shaft. 16 17 References: Bryson, 1936, p. 121-122; 18 Genth and Kerr, 1881, p. 111: 19 Kerr and Hanna, 1888, p. 209, 210, 298, 345; 20-Nitze and Hanna, 1896, p. 137-138; 21 Nitze and Wilkens, 1897, p. 66; Pardee and Park, 1948, p. 77. 23 24 25

U. S. GOVERNMENT .....

McGrew mine 1 See House mine, Randolph County. 2 3 1 McGuire (Taylor) prospect 2 Type: Copper 3 Location: Macon County, 8 miles southeast of Franklin and north of Highway 64 to Highlands, on the south side of and near the top 5of Panther Mountain, draining into Brush Creek. A mineralized zone about 4 feet wide in granitic biotite gneiss 7 contains chalcopyrite, pyrite, abundant sphalerite, and quartz. A 8 gossan covers the southwest side of the shaft. The workings consist of 2 shafts, a 10-foot open cut and adjoining 5-foot drift. A very 10extensive dump contained considerable ore in 1946. 11 12 Reference: Hunter and Gildersleeve, 1946, p. 18-19. 16 MacIntire mine 1 Type: Gold 2 Location: Polk County, South Mountain area. 3 Reference: Nitze and Hanna, 1896, p. 174. 22 24 25

```
1
    McKenzie mine
    Type: Gold
2
    Location: Caldwell County, near the Scott Hill mine northwest of
3
         Hartland.
 5-
         Gold-bearing quartz veins and saprolite were reported. In 1906
6
    the Blue Ridge Mining and Milling Company sank a vertical shaft to a
7
    depth of 68 feet, and erected a 5-stamp mill. Gold production was
8
    reported in 1914.
 10-
    References: Pratt, 1907, p. 36;
11
                  Pratt and Berry, 1919, p. 22.
12
     McLean (Rumfeldt) mine
 1
      Type: Gold
 2
     Location: Gaston County, near the southeast corner of The county,
           15 miles southwest of Charlotte.
  5-
           Gold occurs with pyrite in a quartz vein from 1 to 6 feet wide.
      The vein was prospected before 1896 for a length of 200 yards and a
7
      depth of 110 feet.
9
 10-
     References:
                   Bryson, 1936, p. 129;
                   Kerr and Hanna, 1888, p. 304;
11
                   Nitze and Hanna, 1896, p. 148;
12
                   Nitze and Wilkens, 1897, p. 66;
13
                   Pardee and Park, 1948, p. 62.
14
```

```
McLean mine
      Type: Gold
      Location: Mecklenburg County.
3
           Gold, pyrite, and chalcopyrite were noted in ore-
      Reference: Genth and Kerr, 1881, p. 111.
      McMakin mine
      See Whitney group, Cabarrus County.(
11
    McNeely mine
    Type: Gold
    Location: Union County, 4 miles south of Mineral Springs.
 8- Reference: Pardee and Park, 1948, p. 65.
11
     Macon mine
     see Otto mine, Macon County
    Macpelah Church prospect
    Type: Copper
    Location: Lincoln County, 2 miles east of Macpelah Church.
         Pyrite and chalcopyrite were noted.
```

Reference: Genth and Kerr, 1881, p. 107.

```
1
     Magazine mine
     Type: Gold
3
     Location: Burke County, lower slope of Pilot Mountain.
 5-
          This was a placer mine.
7
8
     References: Nitze and Hanna, 1896, p. 165;
                  Pardee and Park, 1948, p. 62.
 10-
      Main Shaft mine
  2
         see Condon Shaft mine, Lincoln County (
.13
14
     Mann mine
 1
      Type: Gold
 2
      Location: Halifax County, near the Portis mine.
 3
      References: Bryson, 1936, p. 63;
  5 -
                   Kerr and Hanna, 1888, p. 241;
                   Nitze and Hanna, 1896, p. 27;
                   Nitze and Wilkens, 1897, p. 43.
 8
23
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U. S. GOVERNO . . .

1 Mann-Arrington mine Type: Gold Location: Nash County, at Argo Post Office, in the northwest corner of Nash County, 12(?) miles east of the Portis mine, and 5 miles southeast of Ransom's Bridge. This is possibly the same as the Arrington mine. Quartz lenses, varying in size from stringers up to 12 inches in thickness, are interlaminated in chloritic schist, possibly a metamorphosed diorite. Some of the lenses cut the schistosity at low 10angles. The quartz is saccharoidal and stained reddish brown from 11 decomposed sulfides. The schist contains iron sulfides. The mine was last worked in 1894 to a depth of 108 feet. 13 References: Bryson, 1936, p. 62; 15-Kerr and Hanna, 1888, p. 241; 16 Nitze and Hanna, 1896, p. 26-27; 1, Pardee and Park, 1948, p. 64. : 4 Marion mine See Lemmonds mine, Union County. 2 23 24

```
1
      Marion Bullion Company (Brackettown, Granville) mine
      Type: Gold
 2
 3
      Location: McDowell County, at Bracket-town in the valley of the
           headwaters of South Muddy Creek.
  5-
           Gold occurs in placers along the stream and in quartz veins in
 7
      biolite gneiss country rock. The vein quartz is saccharoidal and
 8
      mineralized with galena, sphalerite, chalcopyrite, pyrite, and gold
 9
      and silver.
  10-
           Placer gold mining started after 1828 when gold was discovered
11
      in Burke County. Sometime later, before 1896, a vertical shaft was
12
      sunk to a depth of 126 feet on 6 small quartz veins.
` 13
14
      References: Bryson, 1936, p. 139-140;
  15-
                    Caldwell, 1893, p. 308;
16
                    Kerr and Hanna, 1888, p. 315;
                    Nitze and Hanna, 1896, p. 166-168.
17
18
       Martha mine
  1
       See Stackhouse mine, Madison County. (
 22
23
24
  25-
```

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6

# Martha Washington mine

Type: Gold

Location: Montgomery County, 2 miles northwest of Candor, adjoining the Iola mine on the north.

A continuation of the vein at the Candor mine. The vein is supposed to have passed down the dip into the ground of the Martha Washington at a depth of 600 feet. In 1911 or 1912 the Martha Washington Gold Mining Company, of Candor, N. C., sank a 50-foot inclined shaft.

References: Pardee and Park, 1948, p. 83; Pratt, 1914, p. 22-23.

### Mastodon (Pocahontas) mine

Type: Copper

Location: Granville County, south of the Holloway mine and near the Person County line.

A shallow pit was sunk in copper carbonate stained quartz in porphyritic greenstone.

Reference: Kerr and Hanna, 1888, p. 217.

24

25

7

Mauney mine 1 Type: Gold, silver 2 Location: Cabarrus County,  $1\frac{1}{2}$  miles southwest of Gold Hill, on the west side of Little Buffalo Creek. 5--In 1894 two prospect shafts were sunk to a depth of about 6 70 feet. 7 8 Reference: Nitze and Hanna, 1896, p. 91. 10~ 11 Mauny, Fred, and Gus Clark prospects Type: Tin . 2 Location: Gaston County, about 3/4 mile south of the Jones prospects. 3 The deposits are about 1/4 mile apart. 5-Cassiterite occurs in greisen gangue in muscovite schist and gneiss and hornblende gneiss. Float ore was found at these locations. 7 8 Reference: Kesler, 1942, table 18. 21 24 25

2

5 -

10-

11

12

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20 -

# Mauney Park prospect

Type: Tin

Location: Cleveland County, on the south side of a small valley cutting across Chestnut Ridge, about 1 mile north of the north edge of the town of Kings Mountain.

Cassiterite-bearing greisen boulders were discovered in surface soil in a small park area. The country rock is kyanite-mica schist and gneiss and hornblende schist. An 8-foot wide pegmatite dike carries a 2-foot wide band of cassiterite-bearing greisen. In 1904 several pits and a crosscut trench were dug.

References: Keith and Sterrett, 1917, p. 142-143;
Kesler, 1942, table 18.

#### Maxwell mine

See Peachbottom mine, Alleghany County.

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1
        Maxwell (Hagler) mine
  2
        Type: Gold
        Location: Mecklenburg County, 11 miles east of Charlotte.
 3
             Large masses of pyrite with gold and chalcopyrite occur in
  5-
        a quartz vein 1 to 6 feet wide. The vein has been worked to a
 7
        depth of 75 feet.
  8
        References: Genth and Kerr, 1881, p. 111;
                      Kerr and Hanna, 1888, p. 302;
  10-
                      Nitze and Hanna, 1896, p. 144;
                      Pardee and Park, 1948, p. 63;
 12
. 13
                      Tuomey, 1848, p. 89-90.
 14
         Mayberry mine
  2
         Type: Gold
         Location: Mecklenburg County, 1\frac{1}{2} miles south of Huntersville. -
  3
  4
        Reference: Pardee and Park, 1948, p. 63.
   5-
  20--
      Meadow Creek mine
      Type: Gold,
 2
      Location: Cabarrus County,
      Reference: Pardee and Park, 1948, p. 62.
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Means (Mears) mine
 1
     Type: Gold
 2
     Location: Mecklenburg County, 5 miles northwest of Charlotte, 1/2
 3
          mile southeast of the Capps mine.
  5-
          Gold and chalcopyrite occur in a quartz vein in schist. The
 6
     vein has been thought to be a continuation of either the Capps or
 7
     Jane veins, but it probably is not. The vein has been worked at
 8
     several places and to a depth of 175 feet in the Wallace shaft.
  10-
     References: Bryson, 1936, p. 122;
11
                   Nitze and Hanna, 1896, p. 138-139;
12
. 13
                   Pardee and Park, 1948, p. 63.
14
 1
      Melton mine
 2
      Type: Gold
 3
      Location: Rutherford County, near Golden.
  5 -
           The mine was a large producer of placer gold in 1916 and 1917
 6
      when it was owned by W. E. Sudlow.
 7
 8
      References: Pardee and Park, 1948, p. 65;
                   Pratt and Berry, 1919, p. 25.
 24
  25
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Merrill mine

Type: Gold

Location: Randolph County, on Carroway Creek, 3 miles west of Sophia.

Saprolite overlying sericitic quartz schist extends to a depth of 50 to 60 feet. Workings over 100 years old including an 300 shaft were seen in 1934. The workings consisted of eight cross-cut trenches and many test pits. in 1906.

References: C. B. Brown, 1934, written communication;

Pardee and Park, 1948, p. 64;

Pratt, 1907, p. 26.

## Metcalf prospect

Type: Tin

Location: Gaston County, about 6 miles south of Lincolnton.

Cassiterite occurs in greisen and feldspathic gangue in hornblende gneiss wall rock. An ore body 18 inches thick occurs in greisen gangue, and 6 inch and 1-1/2 inch thick ore bodies occur in feldspathic gangue. All are unconformable with the attitude of the wall rocks. The deposit was worked to a depth of 20 feet. Ore was also noted in greisen gangue in hornblende gneiss in a prospect 1,555 feet N.70°W. of the Metcalf prospect.

Reference: Kesler, 1942, table 18.

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1
     Miami mine
2
     See Phoenix mine, Cabarrus County.
3
     Mica City Creek prospect
1
2
     Type: Copper
     Location: Macon County, 7 miles northeast of Franklin near the head
3
          of Mica City Creek.
 5-
          Pyrite, pyrrhotite, chalcopyrite, and galena were seen on the
6
     dump. A 50-foot open cut and drift were worked about 1920.
7
     Reference: Hunter and Gildersleeve, 1946, p. 19.
8
12
    Michapx mine
 1
2
     Type: Gold
3
     Location: Caldwell County, near the Baker mine on John's River.
 5-
    References: Kerr and Hanna, 1888, p. 308;
7
                  Pardee and Park, 1948, p. 62.
 20-
 1
      Midas mine
      See Farr, Allen, mine, Cabarrus County.
'د ي
24
 25
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```
Midway mine
1
      Type: Gold
2
     Location: Davidson County,
           Gold, pyrite, chalcopyrite, and chalcedony were noted in the
 5-
      ore.
7
      Reference: Genth and Kerr, 1881, p. 101
     Mill Creek mine
 1
     Type: Copper
2
     Location: Person County,
3
           Chalcocite was noted in the ore.
 5--
6
     Reference: Genth, 1891, p. 24.
7
17
18
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Miller mine
                                                                                Z
 2
     Type: Gold
     Location: Caldwell County, 1 1/2 miles northwest of Hartland, on Seley's
     (Celia) Creek, adjoining the Scott Hill mine, and 2 miles east of
  5- John's River.
 6
          A quartz vein in schistose country rock near a diabase dike altered
 7
     to serpentine carried gold, galena, and pyromorphite. Placer mining
 9
     was done in the stream beds and on the saprolite surface. Numerous
  10- cots, tunnels, and shallow shafts were seen in 1896. A 5-stamp mill
     was in operation at one time in the 1800's, but by 1896 it had been
12
     converted into a distillery. The small growth on the dumps and the
٠ 13
     state of preservation of the head frame when examined in 1966 suggest
14
     that work has been done here since 1936.
  15-
     References: Bryant and Reed, 1966, p. 7;
16
                  Bryson, 1936, p. 139;
17
18
                  Genth and Kerr, 1881, p. 96;
 19
                  Kerr and Hanna, 1888, p. 308;
  20-
                  Nitze and Hanna, 1896, p. 176;
 21
                  Nitze and Wilkens, 1897, p. 68;
 22
                 Pardee and Park, 1948, p. 62.
 23
 24
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Miller mine
1
      Type: Gold
2
      Location: Davidson County.
           Gold, pyrite, limonite, and hematite were noted in the ore.
6
      Reference: Genth and Kerr, 1881, p. 101.
7
      Miller mine
 1
            See Delft mine, Randolph County
2
      Miller mine
 1
 2
         see Gold Hill mine, Rowan County
14
    Miller mine
     Type: Copper
2
     Location: Watanga County, at the southern base of Elk Knob.
         Pyrite and chalcopyrite occur in gray gneiss, covered by limonite
 5-
    gossan. In 1874 there was a 60-foot shaft.
7
    References: Genth and Kerr, 1881, p. 120;
8
                 Kerr and Hanna, 1888, p. 224.
 10-
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```
Millis Hill (Willis Hill) mine
 1
       Type: Gold
 2
       Location: Guilford County, 5-6 miles south of Greensboro, 150 rods
 3
            south of the Fisher Hill mine, and in the same 900 acre tract.
  5-
            This mine is on the same north-south and northeast-southwest
 6
       quartz vein systems in sheared granite country rock as the Fisher
 7
       Hill. The amount of chalcopyrite in the ore is greater here than
       in the Fisher Hill ore. The work here consists of 4 shafts of much
       shallower depths than those at the Fisher Hill.
 .10-
 11
       References: Bryson, 1936, p. 105;
 12
                     Kerr and Hanna, 1888, p. 278-279;
. 13
                     Nitze and Hanna, 1896, p. 110-111;
 14
                     Nitze and Wilkens, 1897, p. 45;
  15-
                     Pardee and Park, 1948, p. 75.
 16
 17
        Millright mine
  1
              See Phillips mine, Chatham County (
  2
 21
 22
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1 Mills, J. C., mine Type: Gold 2 Location: Burke County, 2460 acres near Briedletown on the eastern side of Pilot Mountain, on Brindle Creek and Silver Creek. 5-6 Placer gold was mined from the streams which also yielded 7 monazite, zircon, fergusonite, xenotime, rutile, garnet, and corundum. Gold-bearing quartz veins in schists were discovered later. Gold 9 was discovered in 1828 on Brivadle Creek, named for the Brindle 10family, the first settlers. The property was purchased by 11 Capt. J. C. Mills about 1835 and has been owned and mined by the 12 Mills family ever since. At one time a 5-stamp mill was operated on 13 the ore mined from the veins. In 1916 it was estimated that gold 14 production had been more than \$1,000,000. 15-16 References: Kerr and Hanna, 1888, p. 313-314; 17 Nitze and Hanna, 1896, p. 165-166; 18 Nitze and Wilkins, 1897, p. 95-97; 19 Pardee and Park, 1948, p. 65; Stuckey, 1965, p. 308. 20-21 1 Mills, L. A., mine Type: Gold 2 Location: Polk County, South Mountain area.

Reference: Nitze and Hanna, 1896, p. 174.

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Mine Ridge prospect
 1
      Type: Barite
 2
      Location: Madison County, at the crest of the easternmost portion of
           Mine Ridge and at the top and bottom of the western slope of
           Mine Ridge.
  5-
 6
           The prospect pits suggest a continuous mineralized zone along
      the crest of Ming Ridge. Sacchdroidal white barite and coarsely
 9
      crystalline gray barite were found in 4 pits in arkose and
  10-
      conglomerate of the Unicoi Formation.
11
      Reference: Orie1, 1950, p. 52.
12
13
     Mint Hill mine
      See Pifer mine, Union County.
  2
17
  1
       Mole Hill mine
        See Dunlop mine, Mecklenburg County.
  2
  3
21
       Monarch mine
            See Alta mine, Rutherford County
  2
```

Monroe mine 1 Type: Gold Location: Moore County, 1/2 mile northwest of West Philadelphia; and 2 miles southwest of Spies, along Mill Creek. 5--Gold occurs in a quartz vein and in the country rock. 6 the vein was discovered placer mining was carried on in Mill Creek and its tributaries. After the discovery of the vein the mine was operated intermittently until 1900. 10-References: Conley, 1962a, p. 26; 11 Pardee and Park, 1948, p. 64. 12 Montgomery mine 1 2 Type: Gold Location: Cabarrus County, near the Concord City limits on the west 3 side. 5-This may have been a placer mine. Signs of old holes in biotite 6 granite country rock on the bank of a deep ravine were seen in 1934. 7 References: C. B. Brown, 1934, written communication; Nitze and Hanna, 1896, p. 121; 10-Pardee and Park, 1948, p. 63. 11 12 25

Montgomery (Uwarra) mine 1 Type: Gold 2 Location: Montgomery County, 2 1/2 miles northwest of Candor, 3 adjoining the Iola mine on the northeast. 5-Gold bearing quartz veins in greenstone schist altered from andesitie tuffs and porphyry. The veins are a continuation of the 7 lode at the Iola Mine which strikes N.55°E. The veins average 5 to 9 8 inches in width and some are displaced as much as 35 feet by aults. The ore was almost free of sulfides. 10-The mine was opened in 1903 by the Montgomery Mining 11 The Uwarra Mining Company owned the mine in 1911 and did a 12 great deal of development work during 1911 and 1912. By 1913 the 13 veins were opened by 2 shafts of 300 and 400 feet depths, with drifts 14 at 100-, 150-, 225-, and 300-foot levels, and a 50 ton cyanide plant 15was in operation. During the last years of operation the ore averaged 16 0.165 to 0.215 ounce of gold per ton. The total production of the 17 Montgomery mine through 1915 is estimated at \$100,000. 18 19 References: Bryson, 1936, p. 77-78; 20-Pardee and Park, 1948, p. 82-83. 21 Pratt, 1905, p. 14; 22 Pratt, 1907, p. 51-53; 23 Pratt, 1914, p. 22, 38-44. 24

Moody mine 1 Type: Gold 2 Location: Moore County, 2 miles southwest of Carter. 3 Reference: Pardee and Park, 1948, p. 64. 5--Moody prospect Type: Copper Location: Jackson County, on the southwest side of the Tuckasegee River, about 2 miles northeast of the Cullowhee mine. 5-The country rock is sericite schist. The ore seen on the dumps **6** was composed chiefly of pyrrhotite with very little chalcopyrite. Some work was done before the Civil War, and the deposit was last , 8 explored in 1929 and 1930. The workings consist of several open cuts and a shaft said to be 165-feet deep. An analysis of ore by TVA in 10-1942 contained 0.19 percent copper, trace of zinc. 11 12 13 A. R. Kinkel, 1957, written communication.

References: G. H. Espenshale, 1944, written communication.

#### Moore mine

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Type: Gold

Location: Davidson County,

Galena, pyrite, and calcite were noted in the ore.

Reference: Genth and Kerr, 1881, p. 101.

Moore mine Type: Gold Location: Mecklenburg County, The ore consists of disseminated sulfides with sphalerite, galena, and pyrite in silicified slate and diorite. Vein no. 1 is opened by the Blue Shaft. The Moore mine in Union County (303) also has a No. 1 vein opened by a Blue Shaft, which suggests confusion. References: J. T. Pardee, 1934, written communication; 11 Pardee and Park, 1948, p. 63. 12 Moore mine Type: Gold 2 Location: Montgomery County, in the northeast part of the county. 5-Reference: Kerr and Hanna, 1888, p. 247; Pardee and Park, 1948, p. 63. . 1 22 23 24

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# Moore mine

Type: Gold

Location: Union County, 4 to  $4\frac{1}{2}$  miles southwest of Brief, and 2 miles southwest of the Long mine.

This may be the same mine as an unlocated Moore mine in Mecklenburg County.

quartz veins carrying pyrite, galena, chalcopyrite, and sphalerite, are conformable with the foliation of chlorite schist country rock. The main vein is 5 feet thick and contains a 4-inch pay streak composed of calcite with free gold. The ores carry both gold and silver. The No. 1 vein was developed in the 1890's by a shaft 80 feet deep known as the "Blue shaft," which was further developed in 1906. The No. 2 vein, \(\frac{1}{2}\) mile to the east, was developed in 1906 by the Moore Mining Company under Mr. R. J. Wentz. The Wentz shaft was sunk to a depth of 180 feet. On the No. 3 vein, parallel to the No. 2 vein and 150 feet away, are 2 shafts, each 50 feet deep. There was a 3-stamp mill on the property in 1906. Ore from the dump of the Wentz shaft assayed 0.15 ounce of gold and 0.03 ounce of silver per ton.

References: Bryson, 1936, p. 92;

Kerr and Hanna, 1888, p. 190-191;

Nitze and Hanna, 1896, p. 95-96;

Nitze and Wilkens, 1897, p. 63;

Pardee and Park, 1948, p. 103-104;

Pratt, 1907, p. 62-63.

Moore, John C., mine

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see Warne mine, Clay County.

# Moore Hill mine

Type: Gold

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Hill mine is the southernmost of a group of mines known as the Moore Hill or Lewis group distributed along a northeastward-trending mineralized zone for a distance of about 3 miles.

Other mines of the group are, from southwest to northeast, the Davis, Folger Hill, Ore Hill, Phifer (Price, Mint Hill), Lewis, East Hill, Hemby, and Harkness mines.

Gold occurs in a zone of argillaceous schist 3 miles long and about  $\frac{1}{2}$  mile wide. The schist varies from soft to highly silicified and is impregnated with finely divided pyrite, lenses of pyrite and calcite, and stringers of quartz. The schist carries from 3 to 5 parallel bodies of gold-bearing material. These bodies are from 1 foot to several feet wide, and are composed of vertical layers in which the original slaty rock of the volcanic series has been replaced by fire-grained quartz. Silver-bearing galena occurs in the ore of several of the mines.

The Moore Hill mine was opened before the Civil War and has been worked for a length of 100 feet and to a depth of 70 feet. In 1933 exploration work was undertaken at this group of mines. At one spot a shaft was sunk to a depth of 40 feet. The ore from this shaft was a soft, decomposed schist containing numerous stringers of quartz. Several unsuccessful attempts were made by Mr. A. J. Terry of Charlotte to mill this ore and ore obtained from prospect pits. Free gold from old dumps assayed from 0.05 to 0.06 ounce of gold per ton.

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References:
                  Bryson, 1936, p. 95-97;
1
                  Bryson, 1937, p. 18;
2
                  Kerr and Hanna, 1888, p. 189, 263;
3
                  Nitze and Hanna, 1896, p. 100-102.
5--
       Moratock Mine
2
                    Gold
       Type:
3
                    Montgomery County, 1 mile southeast of Moratock, and
       Location:
                    a few hundred yards north of Highway N. C. 27 on the
 5-
                    western edge of the Uwharrie Mountains, or 8 miles
                    south of Eldorado
                         The country rock is sheared quartz porphyry and
                    felsic tuff. Quartz veins up to 10 inches in width
 10-
                    carry gold, chalcopyrite, pyrite, and copper carbonate.
11
                    The pyrite assayed less than $1.00 per ton. The mine
12
                    was opened by two northeast trending open cuts 200
13
                    feet long and a shaft. A 10-stamp mill with a cyanide
14
                    plant operated until 1893, when the ore was reported to
 15-
                    be of too low grade to be profitably treated.
16
       References:
                    Bryson, 1936, p. 75;
17
                    Conley, 1962, p. 17-18;
                    Nitze and Hanna, 1896, p. 79-80;
19
                    Nitze and Wilkens, 1897, p. 53-54;
 20-
                    Pardee and Park, 1948, p. 63.
21
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Morgan mine
 1
      Type: Gold
      Location: Davidson County, 2 1/2 miles north of Silver Hill.
      Reference: Pardee and Park, 1948, p. 62.
 5-
6
      Morgan mine
 1
      Type: Gold
 2
      Location: Rowan County, 8 to 10 miles east of Salisbury.
 3
  5--
      Reference: Kerr and Hanna, 1888, p. 282.
 6
13
14
      Morris mine
 1
      Type: Gold
      Location: Polk County, at Sandy Plains.
 3
      Reference: Genth and Kerr, 1881, p. 115.
 6
21
23
24
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Morris Mountain (Davis, Dutton, Ophir) mine 1 Type: Gold 2 Location: Montgomery County, 0.6 mile north of Eldorado, a few 3 hundred yards northwest of the Eldorado-Coggins mine road, and one mile west of the Appalachian or Coggins mine, on the west 5-flank of the Uharrie Mountains. 7 The occurrence of gold here is similar to that at the Russell mine. The argillaceous slate country rock is crushed, fractured, 9 silicified, and mineralized with fine pyrite. Coarse gold in quartz 10stringers was seen in the shear zone and in joint planes in the schist. 11 Two shallow shafts were put down around 1890. The mine was last 12 worked in 1910 by Louis Dunkard who milled the ore at the Dark . 13 Springs mine mill. 14 15-References: C. B. Brown, 1934, written communication; 16 Conley, 1962, p. 17; 17 Kerr and Hanna, 1889, p. 251-252; 18 Nitze and Hanna, 1896, p. 76-77; 19 Nitze and Wilkens, 1897, p. 53; 20-Pardee and Park, 1948, p. 63. 21 Morrison mine 1 Type: Gold 2 Location: Cabarrus County, near Concord, 3

Reference: Pardee and Park, 1948, p. 62.

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Moseley's Farm prospect
     Type: Copper
 2
     Location: Surry County, 5 miles from Elkin.
 3
           Pyrite and chalcopyrite were found in a 3-foot wide quartz vein in
  5-
     schist.
 7
     Reference: Kerr and Hanna, 1888, p. 231.
 8
  10-
11
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, 13
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Moss-Dryden Moss-Richardson) mine 1 Type: Molybdenum Location: Halifax County, 1.8 miles south of the Jones-Boy Scout 3 mine, and 3.5 miles east of Hollister. 5-The general geologic setting is the same as at the Jones-Boy 6 Scout mine, this opening being at the south end of the small granite 7 gody associated with the Molybdenum, and the Jones-Boy Scout mine near the north end. Molybdenite occurs with pyrite, chalcopyrite, and sericite in a quartz vein in the granite near a diabase dipe. 10-Secondary minerals are molybdite filling cracks in the quartz veins, 11 and chalcorite and covellite coating pyrite. 12 The deposit was studied by the U.S. Bureau of Mines in 1943, 13 1944, and 1946. It has been projected by shallow pits. A study by 14 the U.S. Geological Survey showed the Dryden vein to be essentially 15barren except where it outcrops in the creek. 16 17 References: Broadhurst, 1955, p. 23-24; 18 Hafer, 1942, p. 83; 19 Julih Moon, 1945, p. 32; 20-Murdock, 1950, p. 15-16; 21 Koschmann, 1943, p. 10-12; میں م Robertson, McIntosh, & Ballard, 1947, ہو، 9 م 23 Stuckey, 1965, p. 327. 24 25

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Mostellar Vein
    Type: Tin
    Location: Lincoln County, southwest of the Henry shaft, part of the
         Ka-Mi-Tin mine.
 5-
         Cassiterite occurs in greisen gangue in muscovite schist and
6
    hornblende gneiss wall rock.
7
    Reference: Kestler, 1942, table 18.
      Mountain mine
      Type: Gold
2
      Location: Cleveland County.
           Gold occurs in placers; also associated with pyrite, galena,
      and arsenopyrite.
7
     Reference: Genth and Kerr, 1881, p. 100.
19
    Mount Zion mine.
1
2
    Type: Gold
                              near Mount Zion
    Location: Wilkes County.
 5- Reference: Bryson, 1930, p. 19.
 25-
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Mueller (Muller) mine
     Type: Gold
 2
     Location: Lincoln County, 5 miles east of Lincolnton, on the J. F.
 3
          Mueller farm.
  5-
          Placer gold was panned along a small stream. The source may have
 6
     been stringers of quartz, several of which are exposed nearby. A rich
 7
 8
     pocket of gold is said to have been mined before the Civil War in the
     vicinity of the Keener lime quarry nearby.
 10-
     Reference: Pardee and Park, 1948, p. 77.
11
12
· 13
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Murford mine Type: Gold 2 Location: Stanly County, 1 mile west of New London on a branch of Town Creek. 5 --This was a placer mine with the gold concentrated in the lowest 6 foot of a 3-foot thick gravel bed. A  $l_2^1$  feet wide quartz vein in andesite tuff was traceable for some distance. Mr. A. V. Wynne of New London tested the gravels in 1933 with a G-B portable placer machine. He reported an average recovery of & det. per yard from the 10-"valley bottom grit" and 3/4 dwt. per yard from the "dry-run grit". 11 The deposit has been worked for a length of 900 yards and a width of 12 75 to 150 feet. Near the upstream end of the mine an open-cut 13 extends 300 feet up a dry run. 14 15-References: C. B. Brown, 1934, written communication; 16 Bryson, 1937, p. 20-21; 17 Pardee and Park, 1948, p. 97. 18 Myers mine 1 See Gold Hill mine, Rowan County. ( 2 22 23 24 25

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Nall mine
 1
     Type: Gold
2
     Location: Montgomery County, near Stokes' Ferry.
3
 5~
     References: Kerr and Hanna, 1888, p. 253;
6
                   Pardee and Park, 1948, p. 63.
7
      Nantahala mine
 1
      see Patton mine, Macon County(
 2
        Narville mine
 1
         Type: Gold
 3
        Location: Cabarrus County, 3-3/4 miles northwest of Georgeville;
              on Mrs. Addie Foil's place.
  5~
             A 10 to 12 inch quartz vein, possibly a continuation of the
 7
        Phoenix vein. A 100-foot shaft was worked about 1900.
        References: C.B. Brown, 1934, written communication;
                      Pardee and Park, 1948, p. 62.
 10-
22
     Nash and Plott mine
     Type: Gold
 2
     Location: Cabarrus County, 5\frac{1}{2} miles southeast of Concord. \sim
 3
  5- Reference: Pardee and Park, 1948, p. 62.
```

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1
     Neal mine
     Type: Gold
2
3
     Location: Polk County, South Mountain area,
     Reference: Nitze and Hanna, 1896, p. 174.
 5--
      Neal, F. S., mine
 1
 2
      Type: Gold
      Location: Mecklenburg County, 6 miles northeast of Charlotte.
 4
 5-
     Reference: Pardee and Park, 1948, p. 63.
6
12
      Neal, T. G., mine
 1
      Type: Gold
 2
      Location: Mecklenburg County, adjoins the Stephen Wilson mine.
 3
  5-
      References: Nitze and Hanna, 1896, p. 132;
                   Pardee and Park, 1948, p. 63.
 7
 20-
      Negus mine
      Type: Gold
      Location: Rowan County, southwest of Salisbury, east of the Southern
 3
           Rqilroad.
  5 -
      Reference: Nitze and Hanna, 1896, p. 117.
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Nesbitt mine
1
    Type: Gold
2
    Location: Union County, 2 1/2 miles southwest of Waterloo.
3
 5-
    Reference: Pardee and Park, 1948, p. 65.
     N#ttie mine
     See Stackhouse mine, Madison County.(
2
 10-
 1
            Mine ((Newberry
      Newby
      Type:
                   Gold
                   Randolph County, 4 miles south of west of Asheboro
      Location:
  5-
                        The country rock is a dense silicified tuff which
                   is impregnated with sulfides. The gold may be carried
                   in porcelainite stringers in the silicified tuff. .
                   The mine was worked in the 1880's or earlier. A shaft
                   and several pits were seen in 1934.
 10-
      References: C. B. Brown, 1934, written communication:
                Pardee and Park, 1948, p. 64.
12
23
24
 25
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1 New Discovery Mine 2 Gold Type: 3 Rowan County, 3 miles east of Salisbury, and 2 miles Location: north of Granite Quarry. 5-6 The ore was in a quartz vein in a sheared diorite 7 granite complex about 200 yards northwest of the main 8 granite body passing through Dunns Mt. The mine was worked to a depth of about 100 feet in the 1880's and 10-1890's. In 1883 a plant for treating the ore by the 11 Designolle process was erected, but the ore was found 12 deficient in quantity and difficult to treat, and all operations ceased toward the close of the year. 14 Brown, C. B., 1934, written communication; References: 15-Nitze and Hanna, 1896, p. 117. 16 Newell mine 1 See Dixie Queen mine, Cabarrus County. 2 3 20-Newell mine Type: Gold Location: Mecklenburg County, 3 Reference: Pardee and Park, 1948, p. 63. 5 --

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Newlin's mine 1 Type: Gold 2 Location: Alamance County, 3 Gold, pyrite, and chalcopyrite were noted. 5-6 Reference: Genth and Kerr, 1881, p. 91. New Nugget mine 1 See Nugget mine, Cabarrus County. 2 New Savannah mine 1 See Savannah mine, Jackson County 2 New Sawyer (Ross, Powell) Mine 1 2 Gold Type: 3 Randolph County, 3 miles northeast of the Sawyer Mine Location: Several mineralized zones in quartz sericite 5schist with interbedded tuff layers were described. 6 One zone 3 to 15 feet wide for a length of 500 feet assayed 0.057 to 0.24 ounce of gold per ton. Another zone showed an average of 0.046 ounce per ton across 9 a width of 87 feet. Work was done here in 1902, and 10the sampling mentioned above was done in 1930 by 11 12 H. D. McDonald. 13 References: C. B. Brown, 1934, written communication; 14

Pardee and Park, 1948, p. 88.

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New South mine
1
     Type: Gold
2
     Location: Union County, 1/2 mile southwest of the Moore mine.
3
          Disseminated pyrite with gold in stringers of quartz was found
 5
      in greenstone schist. The mine was worked down to the 25-foot level,
     below which the ore was unoxidized and the gold could not be projitably
7
     extracted by the methods then in use.
8
9
     References: Bryson, 1936, p. 93;
 10-
                  Nitze and Hanna, 1896, p. 98;
11
                  Pardee and Park, 1948, p. 104.
12
    Nibelong (Niebelung, Blue Ridge) mine
1
    Type: Gold
2
    Location: Caldwell County, 11 miles north of Morganton and near Hartland.
3
 5-
         A gold-bearing quartz vein averaging 2 feet in width was developed
6
    in 1903 by the Blue Ridge Mining and Milling Company. A 75-foot shaft
7
    was bunk with drifts running 60 feet to the northeast and 55 feet to
8
    the southwest. The property was equipped with a 5-stamp mill. In
    1912 development work was done by the Niebelung Gold Mining Company,
    successor to the Blue Ridge Mining and Milling Company. A small amount
11
    of gold was produced in 1913.
12
13
    References: Pratt, 1904, p. 15; 1914, p. 18;
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Pratt and Berry, 1919, p. 22.

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Nick Arrington mine
     Type: Gold
2
    Location: Halifax County, 12 miles east of the Portix mine.
3
4
 5 --
    References: Bryson, 1936, p. 63;
                  Kerr and Hanna, 1888, p. 24;
7
                  Nitze and Hanna, 1896, p. 27.
8
       Nolan mine
 1
       Type: Gold
 2
       Location: Mecklenburg County, near the Ferris mine, about 5-6 miles
3
            north of Charlotte.
 5-
            Gold and pyrite were noted in the ore.
6
7
       References: Genth and Kerr, 1881, p. 111;
 8
                    Nitze and Hanna, 1896, p. 143;
                    Pardee and Park, 1948, p. 63.
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Nooe mine
      Type: Gold
      Location: Davidson County, 3 miles north of Silver Hill.
           The vein averages 3 feet thick and consists of quartz stringers,
  5-
      containing lenses of ore, distributed in fragmental dark blue schist,
      which is probably derived from mashed andesitic tuff. The ore is a
      mixture of galena, sphalerite, pyrite, with a little gold and
      chalcopyrite. A 60 foot shaft was sunk in 1880, and a gold mill was
       erected which operated for about two months.
  10-
11
       References: Pardee and Park, 1948, p. 62;
12
                    Pogue, 1910, p. 107.
- 13
       Norlina (Nor-Lin) mine
  1
       Type: Gold
 2
       Location: Davidson County, near Silver Hill,
 3
            A small stamp mill was operated at this mine in 1903 by the
  5-
       Nor-Lin Mining Company.
       Reference: Pratt, 1904, p. 11, 15.
       North mine
       See Gold Hill mine, Rowan County.
  2
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North Carolina mine

Type: Gold

Location: Franklin County, just below the Portis mine on Shocco

Creek.

This was a placer mine in saprolite similar to the Portis mine. The gold was mainly in a layer of clean gravel from 6 inches to 3 feet thick, on bed-rock, with a layer of tough clay over it. The valley floor was several hundred feet wide with a very low gradient, and the conditions were thought to be favorable for the operation of a dredge. It was operated by the North Carolina Dredging Co.

Reference: Crosby, 1907, p. 856.

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## North Carolina (Feutress) mine

Type: Gold, copper

Location: Guilford County, 9 to 10 miles south of Greensboro.

A quartz vein from 1 to 8 feet wide consisting of a number of stringers was traced for 3 miles along the outcrop along the eastern border of the igneous belt, in the thin edge of the granite where it is cut by numerous trap dykes and other eruptive rocks. The vein carries siderite, chalcopyrite, pyrite, and gold. Some ore shoot to the solid copper (chalcopyrite) was described by Emmons in 1856. Long intervals of barren vein separated the ore shoots. In the lower levels there was almost no copper.

The mine was opened before 1853 as a gold mine, but at a depth of 50 feet iron and copper sulfides were found, and the deposit consequently achieved the distinction of being the first in North Carolina to be mined for copper. Emmons, in 1856, estimated that the mine had produced between 1,400 and 1,500 tons of ore averaging from 14 to 23 percent copper worth about \$133,000. The mine has been idle most of the time since 1856 except for intermittent operation during 1901-1907, when it produced \$26,000. At that time the mine was opened by the Century Development Company of New York, which was milling an old copper slag dump for gold. The newly mined ore was said to assay 50 ounces of gold per ton, and the concentrates to carry 7 percent copper. The total production to 1935 was estimated at \$175,000. The

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Main or Engine shaft was 400 feet deep with 4 levels from 300 to 500 feet in length. Other shafts were the Worth shaft at the extreme southwestern end of the vein, 310 feet deep, and the Colby shaft.

References: Bryson, 1936, p. 106;
Emmons, 1856, p. 196-202;
Kerr and Hanna, 1888, p. 206;
Nitze and Hanna, 1896, p. 111-112;
Nitze and Wilkens, 1897, p. 46;
Pardee and Park, 1948, p. 75;
Pratt, 1907, p. 38-39;
Stuckey, 1965, p. 281, 304-305,

### Northeast Shaft

Type: Copper

Location: Person County, about 1,500 feet northwest of the main shaft of the Durgy mine.

A shaft said to be 100 feet deep is sunk on a vein not nore than 3 feet wide which is paralled to the main vein of the Durgy mine in strike. This vein has been traced for over one-half mile by quartz depris on the surface. The ore seen on a pile at the surface in nearly pure chalcocite with very little bornite in a gangue of quartz with small amounts of calcite, epidote, chlorite, and inclusions of greenstone schist country rock.

Reference: Lange, 1917, p. 141-142.

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1
     North Fork Creek prospect
      Type: Lead-zinc
 2
     Location: McDowell County, on the west side of North Fork Creek near
 3
           its headwaters.
  5-
           Galena and sphalerite are found replacing limestone of the Shady
 6
     Dolomite along a fault zone, the lead-zinc minerals are spotty and not
 7
     uniformly distributed through the limestone. Exploration work was
 8
     done by the American Zinc Company in 1935. Investigations were
     discontinued after several hundred tons of limestone had been blasted off
  10-
 11
      the cliff face.
 12
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     Reference: Bryson, 1937, p. 36-37.
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#### North State (McCullough) mine

Type: Gold, copper

Location: Guilford County, 2½ miles south of Jamestown, on the north side of U.S. Highway 29, 0.5 mile∮ northeast of Krivett Drive.

This mine is on a northeast striking vein system in granite, which includes, from the southwest to northeast, the Lindsay, North State, Jacks Hill, Whitehead, and Aberdeen mines, for a total length of nearly 3 miles. Emmons described the vein as being from 2 feet to 24½ feet wide, with belts of auriferons "brown ore", chalcoyrite, and gold-rich pyrite nodules. The quartz was generally poor in gold. The ore occurs in shoots and pockets and consists of pyrite, chalcopyrite, cuprite, malachite, native gold, and native copper in a gangue of quartz and siderite. The vein was very productive of gold to a depth of 50 feet, and of copper from 50 to 100 feet.

The mine was active before the Civil War. Between March and November 1854 the mine produced \$35,000 in gold and \$10,500 in copper; the total production is estimated to be at least \$125,000. The mine was last worked between 1880 and 1885 and was abandoned in 1885. The Main shaft known as the Eudy Shaft, was a 350-foot inclined shaft with levels at the 90, 130, and 150 foot levels. At the 130-foot level the mine connects with the Jacks Hill and the Lindsay mines. Other shafts put down in the 1880's were the Rodman, 200 feet deep, the Peters, and the Long Shafts. In 1883 a stamp mill \$10 or 20 stamps was erected.

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1
                   C. B. Brown, 1934, written communication;
     References:
2
                   Bryson, 1936, p. 107-108;
3
                   Conley, 1958, p. 34;
                   Emmons, 1856, p. 170-172;
 5-
                   Genth and Kerr, 1881, p. 104;
                   Kerr and Hanna, 1888, p. 207;
                   Nitze and Hanna, 1896, p. 114-116;
                   Nitze and Wilkens, 1897, p. 46;
                   Pardee and Park, 1948, p. 76.
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Nugget (Biggers, New Nugget) mine
 1
      Type: Gold
 2
      Location: Cabarrus County, one mile northeast of Georgeville.
 3
           The country rock is argillaceous schist of the volcanic series which
 5--
      is intersected by basic dikes. Gold has been mined from placers on
 6
      an ancient gravel channel in a dry ravine that heads near the crest of
 7
      a low ridge. Pyrite-and galena-bearing rusty quartz veins in greenstone
 8
      near the summit of the ridge have been explored by a number of shallow
      pits. Placer gold has been mined here off and on since 1885, and the
 10-
      total production is estimated at 4,000 ounces or more. In 1932 a
11
      twelve and one-half pound gold nugget was recovered that sold for $3,400.
12
      In 1935 the property was owned by M. E. Herrin of Charlotte, N. C.
13
      A. L. Nash of Kannapolis cleaned out the Nugget mine in the 1950's.
14
 15-
      References: Broadhurst, 1955, p. 21;
16
                   Nitze and Hanna, 1896, p. 91-94;
17
                   Nitze and Wilkens, 1897, p. 61;
18
                   Pardee and Park, 1948, p. 67.
19
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 1
       No. 3 mine
       See Orchard mine, Babarrus County.
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No.813 mine
    Type: Gold
    Location: Cabarrus County, near Georgeville.
         The mine was operated at some time from 1929 to 1935 by the
 5--
    Cabarrus Mining and Milling Company.
7
8
    Reference: Bryson, 1937, p. 27.
9
      Oak Hill mine
      Type: Gold
      Location: Guilford County, near High Point.
           The mine was developed during 1903 by the Oak Hill Mining
 5-
      Company with satisfactory results. No ore was ever shipped; however.
      Reference: Pratt, 1904, p. 15.
17
     Oconaluftee River
     Type: Gold, Lead
3
     Location: Swain County.
          Gold, argentiferous galena, pyrite, and chalcopyrite were
     reported.
7
     Reference: Genth and Kerr, 1881, p. 118.
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Old Field Mine
1
2
                   Gold
      Type:
3
                    Rowan County, southwest of the Barnhardt vein of the
      Location:
                   Gold Hill Mine, —
 5-
                         The Old Field is probably a continuation of the
7
                    Barnhardt-Miller mineralized zone and the ore is of
                    the same type. The mine was worked to a depth of
                    130 feet. The production of the Old Field and
 10-
                    Barnhardt veins to 1935 is given by Pardee and Park as
                    $730,000 in gold at $20.67 per ounce.
11
12
      References: Laney, 1910, p. 102;
                    Nitze and Hanna, 1896, p. 88;
14
                    Pardee and Park, 1948, p. 89.
 15-
1
    Old Miller mine
2
    Type: Gold
3
    Location: Caldwell County, adjoining the Baker mine at John's River.
 5-
         This was a placer digging.
    References: Nitze and Hanna, 1896, p. 177;
7
                 Pardee and Park, 1948, p. 62.
24
 25
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1
     Old Well Shaft
     Type: Tin
     Location: Lincoln County, southwest of the Henry shaft, of the Ka-Mi-
 3
          Tin mine.
  5-
 6
          Cassiterite ore occurs in greisen gangue in muscovite schist and
 7
     gneiss wall rock. The ore body is conformable with the wall rock. In 1942
 8
     the shaft was flooded to a depth of 65 feet.
 10-
     Reference: Kes#ler, 1942, table 18.
     Oliver mine
 1
      Type: Gold
 2
      Location: Gaston County, 12 miles northwest of Charlotte and 1 mile
          east of Mountain Island, on the west side of the Catawba River.
  5-
           Gold, silver, and pyrite occur with notable amounts of galena.
     Oxidized ore and cellular quartz are found near the surface and sulfides
 7
     appear at a depth of 75 feet.
           This is believed to have been among the earliest operated mines
      in the area, having been worked prior to the Revolutionary War.
 10-
      The workings extered for a distance of 100 yards.
11
12
13
     References: Bryson, 1936, p. 129;
14
                   Genth and Kerr, 1881, p. 103;
                   Kerr and Hanna, 1888, p. 303;
~ 15~
16
                   Nitze and Hanna, 1896, p. 149;
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Pardee and Park, 1948, p. 62.

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Oliver (Crouse, Pasour) mine

Type: Pyrite

Iocation: Gaston County, 6 miles from Dallas and  $4\frac{1}{2}$  miles southeast of grouse on the Seaboard Air Line Railway.

Pyrite seams and lenses having a thickness of from  $3\frac{1}{2}$  to  $7\frac{1}{2}$  feet are exposed for a length of  $2\frac{1}{2}$  miles on the surface. The deposit has been opened by shallow pits and trenches. Pyrite was mined by the Carolina Pyrite Co., until 1901, when the mine passed into the hands of the Virginia-Carolina Chemical Co. and was shut down. In 1911 and 1912 the mine was reopened and developed by the Southern Sulphur Co., of Scanton, Pa. A stope driven to a depth of 260 feet showed 51 inches of ore in the face. The mine was being developed in 1917 and in 1919 the Federal Pyrites Co., worked the property. From 75,000 to 100,000 tons of ore were blocked out in 1917. An analysis made by the U.S. Geological Survey gave 46.49% S; 39.92% Fe, 1.38% Cu, 2.30% Zn, and 0.30% Fb.

Pratt, Prett and Berry,

References: Pratt, 1904, p. 24; 1914, p. 75; 1919, p. 88; Shotts

and Cudworth, 1953, p. 47-53; U.S.G.S. Min. Res. 1917,

p. 45-46.

Stuckey, 1965, p. 331;

# Oliver No. 2 mine

Type: Gold

Location: Gaston County,  $1\frac{1}{2}$  miles west of Mount Holly.

Reference: Pardee and Park, 1948, p. 62.

```
Ophir mine
 1
            See Morris Mountain mine, Montgomery County
 2
      Ophir (Davis) mine
 1
      Type: Gold
2
      Location: Montgomery County, between the west flank of the Uharie
3
      Mountains and the Uharie River.
 5--
           This (was a placer mine and was profitably worked as long as
      there was a good supply of water. There was some difficulty in
7
      recovering the gold due to a tenacious clay overlying the gravel.
8
      A 30-foot wide belt of saprolite here was found to mill $3 per ton,
      in 1895.
 10-
11
      References: Bryson, 1937, p. 78;
12
                    Kerr and Hanna, 1888, p. 248;
13
                    Nitte and Wilkens, 1897, p. 52;
14
                    Pardee and Park, 1948, p. 63.
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Orchard, Sulphur, Elwood, No. 3, mines
 1
      Type: Gold
 2
      Location: Cabarrus County, 1/4 mile east of the Phoenix mine.
 3
           A gold-bearing vein carrying chalcopyrite, pyrite, and barite runs
  5-
      partallel to the Phoenix vein. Emmons, in 1856, did not consider the
 6
      vein rich enough to work. The Connor and Simonton tract, on which the
 7
      Orchard, Sulphur, and Elwood mines were located, was owned by the Phoenix
      Gold Company in 1854.
 10-
      References: Emmons, 1856, p. 178;
11
                   Genth and Kerr, 1881, p. 96;
12
                   (st se.,)
Mining Mag. 1854, v. 2, no. 6, p. 660.
, 13
14
      Ore Hill mine
 1
      Type: Gold
 2
      Location: Union County, 5 miles southwest of Indian Trail and east
 3
           of the Phifer mine, and in the Moore Hill group of mines.
  5-
           The ores are described under the Moore Hill mine.
      a system of cross fissures has been worked to a depth of 80 feet.
 7
 8
      References: Bryson, 1936, p. 96;
                   Nitze and Hanna, 1896, p. 103;
  10-
                   Pardee and Park, 1943, p. 102.
```

#### Ore Knob mine

Type: Copper

Location: Ashe county, about 12 miles east of West Jefferson, along

Peak Creek, a small tributary of the South Fork of the New River,

on the slope of Ore Knob. It is on North Carolina highway 88,

just north of the village of Ore Knob.

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Massive and dissiminated pyrrhotite-chalcopyrite-pyrite ore formed along a fault zone in Precambrian mica and amphibole gneiss and schist. Following ore deposition, vein sulfides and silicates in the wall rock were recrystallized to coarse-grained aggregates of silicates and sulfides. The ore body is a veinlike body 2 to 10 feet thick, but it thickens with fepth to form an ore shoot as much as 40 feet thick. The ore shoot plunges 20° SW parallel to the lineation in the wallrock, and has been developed over a plunge length of 4,000 feet. The ore contains minor sphalerite, galena, magnetite, gold, and silver. A gossan 40 to 60 feet deep formed over the primary ore and was underlain by a thin zone of enriched copper ore.

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1
          The mine was opened in 1855, when 4 shallow shafts were sunk, and
     enriched ore containing 19 percent copper was shipped. The mine was closed
2
     the following year, but was reopened in 1873, and between 1873 and 1883
     200,000 tons of primary ore were mined to produce 12,500 tons of copper.
    During this period 11 shafts were sunk, the deepest of which was 400
 5-
     feet. The mine was worked again in 1896, 1913, 1917-17, and 1927. In
6
    1955 Appalachian Sulphides, Inc., reopened the mine and operated it
     continuously until 1962, when it was again closed down. Total
    production to the end of 1961 is estimated at about 35,000 tons of
 10-
     copper, 9,400 ounces of gold, and 145,000 ounces of silver.
11
12
    References: Conley, 1958, p. 11-13;
13
                 G. H. Espenshade, 1943, written communication;
                  Kerr and Hanna, 1888, p. 226-230;
14
                 Kinkel, 1962, p. 1116-1121; 1967, 58 p;
 15-
                  Ross, 1935, p. 67-77;
16
                 Stuckey, 1965,753-284;
                 Weed, v1911, p. 128-132.
17
                      1900, p. 496-497;
18
      Ore Knob mine
1
      Type: Gold
      Location: Davidson County,
3
      Reference: Pardee and Park, 1948, p. 62.
 5
 25
```

1 Ormond mine 2 Type: Iron, cobalt, gold Location: Gaston County, 1 mile southwest of Bessemer City. Ormond gold mine location given as 5-1/2 miles west of Gastonia is 5 -approximately the same location. 7 Considerable amounts of cobaltian wad or asbolite, were found mixed with the iron ore at this mine in the 1850's. - It was probably the cobalt which went into the pig iron that gave the pig iron of that mine the hardness and toughness for which it was noted. 11 12 Reference: Nitze, 1893, p. 97-102; 13 Pardee and Park, 1948, p. 62; Pratt, 1907, p. 17; 15--Stuckey, 1965, p. 278; 16 Wurtz, 1859, p. 28-29. 17 Ormond, J. A., prospect 1 Type: Tin 2 Location: Gaston County, at north end of Chestnut Ridge. 3 A shallow pit is reported to have encountered cassiterite ore 5in 1936. In 1940 it was inaccessible and no ore was seen. Reference: Kesler, 1942, table 18.

Ormon-Carr prospect 1 Tin Type: 2 Location: Gaston County, adjoins the J. A. Ormond prospect on the 3 south, 1/4 mile east of Long Creek Church. 5-Cassiterite occurs in greisen and feldspathic pegmatite in 6 muscovite and hornblende schist and gneiss. An 8-foot shaft and a 7 few pits were made in a north-south direction along an outcrop of 8 pegmatite. 10-References: Keith and Sterrett, 1918, p. 143; Kesler, 1942, table 18. 11 Ormond, M., Farm prospect 1 2 Type: Tin 3 Location: Gaston County. about 3/4 mile southwest of the Ormond-Carr prospect. 5-6 Cassiterite is reported in greisen gangue in muscovite schist 7 and gneiss country rock. 8 Reference: Kesler, 1942, table 18. Orr, R.B., mine 1 Type: Gold 2 3 Location: Mecklenburg County, 5 miles north of east of Charlotte. Reference: Pardee and Park, 1948, p. 63.

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Otto (Cabe, Little Tennessee, Macon) mine
     Type: Copper
     Location: Macon County, about 1\frac{1}{2} miles southeast of Otto and 10 miles
          south of Franklin.
 5 ---
          Massive sulfide ore consisting of pyrrhotite with pyrite,
     sphalerite, and chalcopyrite occurs in a country rock of granite
     gneiss and hornblende gneiss, of the Carolina Cneiss. The deposit is
     overlain by a gossan cap. A sample of ore taken in 1917 assayed
     33.29 percent S, 45.67 percent Fe, 1.14 percent Zn, 0.21 percent Cu,
 10-
     and 0.26 percent Pb. The mine was first opened in 1857. A tunnel
11
     and 3 shafts have explored the gossan belt. The mine was reopened in
12
     1917-18.
13
     References: Bannister, Cowan and Company, 1869, p. 51;
14
 15-
                   Espenshade, 1944, written communication;
                   Ross, 1935, p. 87-89;
16
17
                   Weed, 1911, p. 140;
                   U.S.G.S., Min. Res. 1917, p. 46.
18
19
      Overton mine
 1
            See Allred mine, Randolph County
 2
22
      Packe's Hill mine
          see Pax Hill mine, Caldwell County
 25-
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Palachian mine
1
     Type: Gold, copper
2
     Location: Guilford County, 10 miles from Greensboro.
          The mine was opened by Mr. Jones of the Tola mine, but very
 5-
     little was found and the mine was abandoned early in 1906.
7
     Reference: Pratt, 1907, p. 39.
      Palmer mine
 1
            See Russell mine, Montgomery County
2
12
      Pannebaker prospects
1
      Type: Copper
2
      Location: Granville County, on the line between Person and Granville
3
            Counties and about one-half mile south of the old Blue Wing
            post-office.
 5-
6
            Prospect pits were opened in 1907 by William M. Pannebaker on
      native copper disseminated as thin plates in quartz and epidote in
      Virgilin a Greenstone country rock. Cuprite and carbonates were
      derived by oxidation.
 10-
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      Reference: Laney, 1917, p. 155-156.
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Panther Knob prospect

Type: Copper

Location: Jackson County, on the north side of Panther Knob, about 3 miles southwest of the village of Cullowhee.

County rock is garnetiferous quartz - mica - feldspar schist. No sulfide minerals were found. There was a shallow opening in limonite-stained schist.

Reference: G. H. Espenshade, 1944, written communication.

(Little Hungry River, Brown) Pardo mine

Type: Lead

Location: Henderson County, 8.5 miles N.72°E. of Hendersonville and 1 mile downstream from Copper Ford, near the headwaters of Little Hungry River.

This occurrence of complex galena, sphalerite, chalcopyrite, and pyrite ore was discovered in about 1932, and has been prospected intermittently since that time. The Tennessee Valley Authority prospected it in 1949, [in]1952, and 1953. Pardo Mine s put down several diamond-drill holes.

Reference: Broadhurst, 1955, p. 21; Stuckey, 1965, P. 323.

```
Parish (Kindley, Kismet) mine
 1
       Type: Gold
 2
       Location: Randolph County, 3/4 mile southwest of the Jones-Keystone
 3
            mine, and 2 miles north of Jackson Creek.
  5-
            The country rock is similar to that at the Hoover Hill mine.
       has been described as a decomposed schist, derived from andesitic tuff.
       The rock is reddish from iron stains and is impregnated with pyrite
       and gold. The ore body was said to be auryeron's actinolite,
       containing pyrophyllite, pyrrhotite, and pyrite. The mine was worked
  10-
       before 1896, and was reopened in 1903, and again in 1929, 1930, and
 11
       in 1931.
12
. 13
       References: C. B. Brown, 1934, written communication;
14
                    Kerr and Hanna, 1888, p. 256;
  15-
                    Nitze and Hanna, 1896, p. 59;
16
                    Nitze and Wilkens, 1897, p. 47;
 17
                    Pardee and Park, 1948, p. 64;
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                    Pratt, 1904, p. 13.
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Parker mine 1 Type: Gold Location: Cherokee County, along Valley River and Parker Branch, 3 about 12 miles above the junction of Valley and Hiwassee Rivers. 5 --6 Placer deposits. Quartz ledges outcropping along the ridge 7 above the river contain pyrite and may be the source of the gold. 8 Reference: Blake and Jackson, 1860, p. 461-466. 10-11 12 13 14 15-16 17 18 19 20-21 22 23 24

Parker Mine

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ce Gold

also: Freehoed mine, Stanly County (504)

tion: Stanly County, at the western city limits of

New London, 9 miles northwest of Albemarle \_\_\_(

The country rock is chloritic schist derived from lava and tuff of the volcanic series, overlain by 100 feet or more of saprolite. Numerous auriferous quartz stringer veins from 1 to 18 inches thick intersect the schist and saprolite in all directions. The quartz is often cellular and carries iron and copper sulfides and iron and manganese oxides in addition to gold. In one quartz vein mined in 1935 a single shoot or pocket consisting of quartz with numerous cavities containing iron and manganese oxides and coarse crystalline gold yielded several hundred ounces of gold. The placer deposit consisted of the upper 6 to 8 feet of saprolite. Gold with quartz gravel was concentrated as a "grit" layer in the lower part of this zone. The richest 3 or 4 acres yielded at least  $\frac{1}{4}$  ounce of gold per cubic yard, with a total of about 10,000 ounces of gold.

The Parker Mine was one of the first discoveries in the southern Piedmont region. Between 1887 and 1896

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/English company, the Stanley Freehold Gold Mines, Ltd., worked the placer deposit extensively in conjunction with the Biles, Flint Springs, and Johnny Parker as the Freehold gold mine. To obtain water for mining the company installed a pipeline  $4\frac{1}{2}$  miles long through which water was pumped from the Yadkin River. The gravel is said to have carried from 0.022 to 0.12 ounce of gold per cubic yard. An unsuccessful attempt was made to work unmodified saprolite with its quartz veins, but only about half of the 0.025 ounce of gold per ton it carried could be recovered. In 1895 and 1896 shafts were sunk to explore quartz veins. The Ross shaft reached a depth of 130 feet, the Cub shaft, 80 feet, and another shaft west of the Ross, 130 feet. At this time there was a 10-stamp mill on the property. After 1896 the mine was in liquidation and was consequently worked very little. In 1933 a sample consisting of 400 pounds of the quartz vein, 600 pounds of schist, and  $6\frac{1}{2}$  tons of placer material, gave an average of better than \$3 per ton. M.E.C. Gallagher of New York erected a small washing plant, but his attempt to recover the gold failed because of the clayey nature of the material. In 1935 the North Carolina Mining Corp., Washington, D. C., explored a quartz vein by means of a 250-foot tunnel and a 95-foot shaft.

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9.1267
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Bryson, 1936, p. 79-81;
     References:
1
                  Bryson, 1937, p. 20;
2
                  Conley, 1962, p. 18;
3
                  Emmons, 1856, p. 140;
                  Kerr and Hanna, 1887, p. 258-259;
                  Nitze and Hanna, 1896, p. 83-84;
                  Nitze and Wilkens, 1897, p. 54-56;
7
8
                  Pardee and Park, 1948, p. 93-95.
9,
     Parker, Johnny, mine
2
     Type:
                Go1d
                Freehold mine, Stanly County (504)
     See also:
     Location:
                Stanly County, near Salisbury.
        The Johnny Parker mine was worked as a placer mine by tributors for
     many years, but was purchased by the Stanly Freehold Gold Mines, Ltd.
     in 1887, and was operated with the Parker, Biles, and Flint Springs
     mines as the Freehold gold mine.
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:1
     Reference: Eng. Mining Jour. v 43, p. 444, 1887.
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Parks mine
1
    Type: Gold
    Location: Mecklenburg County, 1 mile northeast of Charlotte.
         The working never attained great depth.
 5--
6
    References: Kerr and Hanna, 1888, p. 292;
7
                 Nitze and Hanna, 1896, p. 132;
8
                 Pardee and Park, 1948, p. 63.
9
       Parks mine
 1
       Type: Gold
 2
       Location: Rowan County, 2 miles northeast of Granite Quarry.
       Reference: Pardee and Park, 1948, p. 64.
  5-
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1
      Pasour mine
      See Oliver mine, Gaston County. (
2
19
      Pasour Mountain
 1
 2
      see Cross Mountain, Gaston County
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Patterson mine
 1
      Type: Gold
 2
      Location: Gaston County, 1/4 or 1-1/4 mile northeast of Crowder's
 3
           Mountain mine, and 3 miles S. 85° E. of The Pinnacle.
  5--
           Pyrite and chalcopyrite with gold occur in a mineralized zone
6
      in sericite and chlorite schist. The mine was worked in the 1880's,
7
      and was reopened in 1934 by Richard Vail, who found ore showing
      pyrite and free gold at a depth of 70 feet. A sample across a
      width of 4 feet assayed 0.47 ounce gold per ton.
 10-
11
                   Kerr and Hanna, 1888, p. 306;
      Reference:
12
                   Nitze and Hanna, 1896, p. 148;
13
                   Pardee and Park, 1948, p. 62, 74-75;
14
                   Keith and Sterrett, 1931, p. 9;
 15-
16
      Patterson mine
 1
      Type: Gold
 2
      Location: Orange County, about 12 miles northwest of Chapel Hill,
           near the Robeson mine.
  5 --
      Reference: Nitze and Hanna, 1896, p. 53.
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H S COVERNO

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Patterson, farm prospects 1 Type: Tin 2 Location: Cleveland County, about 1 mile southwest of the Ross. 3 prospect, and also 1,300 feet to the northeast. 5-Cassiterite occurs in greisen gangue in muscovite schist and 6 gneiss. Float ore was found at both locations. 7 Reference: Kesler, 1942, table 18. 10-1 Patton (Nantahala) mine 2 Type: Copper Location: Macon County, 4 miles southwest of Franklin, on 3 Cartoogechaye Creek, 2 - 3 miles from the railroad. 5-Chalcopyrite and tetrahedrite occur in a vein of granular quartz in schist near a bank of hornblend c gneiss. The vein is covered by 7 gossan. 9 References: Bannister, Cowan & Company, 1869, p. 51. 10-Smith, 1875, p. 114. 11 Weed, 1911, p. 140. 23 24

U. S. GOVERNO CHA

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1
     Pax Hill (Packe's Hill) mine
2
     Type: Gold
     Location: Caldwell County, 2 1/2 miles northwest of Hartland, near
          John's River.
 5--
6
          Quartz veins in schist near a diabase dike altered to serpentine
7
     carry gold. Three main veins about 30 yards apart were opened in the
     1800's. Placer mining was also done here.
 10-
     References: Kerr and Hanna, 1888, p. 308;
11
                  Nitze and Hanna, 1896, p. 176;
                  Nitze and Wilkins, 1897, p. 68;
12
13
                  Pratt, 1914, p. 19.
14
 15-
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Peachbottom (Maxwell) mine
 1
 2
     Type: Copper, lead
 3
     Location: Alleghany County, on Elk Creek on the north side of Peach
          Bottom Mountain, just west of the village of Stratford.
  5~
          The vein lies in a zone of quartz-muscovite schist in hornblende
     gneiss, and is approximately concordant with the structure of the
 7
     enclosing rocks. The vein dips 86° S, and varies from 4 to 6 feet in
 9
     width. Chalcopyrite occurs as narrow lenses in shear zones in quartz
  10-
     and gneiss, and disseminated with galena, sphalerite, molybdenite, and
11
     pyrite in quartz-barite-calcite rock. A zone of argentiferous galena
     lying on the north wall was 6 to 9 inches wide. Secondary malachite and
12
. 13
     cuprite were seen.
14
          The mine was opened in 1832 and was mined for lead and silver, but
     it was abandoned when chalcopyrite was discovered. In 1858 the mine
16
     was reopened and copper was produced. In 1888 there were 2 shafts,
     140 and 80 feet deep, and a 10-stamp mill. The mine was worked again
17
18
     in 1902,
 19
  20- References: Conley, 1958, p. 11;
                  G. H. Espenshade, 1943, written communication;
 21
                 /Kerr and Hanna, 1888, p. 204, 230-231;
 22
 23
                  Ross, 1932, p. 85-87;
 24
                  Weed, 1911, p. 133-134.
  25
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U. S. GOVERNMEN

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Peachtree mine
1
     Type: Gold
2
3
    Location: Catawba County,
    Reference: Pardee and Park, 1948, p. 62.
     Pear Tree Hill mine
 1
     Type: Gold
2
     Location: Montgomery County, on the west flank of the Uharie
3
          Mountains, on Pear Tree Branch.
 5-
          This was a placer mine in gravel underlying saprolite. Mining
     was hindered by the scarcity of water and by the tenacious nature of
7
     the clayey saprolite. Nuggets of gold the size of tobacco plugs
     (\frac{1}{2}"x1\frac{1}{2}"x3") are said to have been recovered here.
9
 10-
     References: C. B. Brown, 1934, written communication;
11
                   Bryson, 1936, p. 78;
12
                   Kerr and Hanna, 1888, p. 248;
                   Nitze and Hanna, 1896, p. 80;
14
                   Nitze and Wilkens, 1897, p. 52;
 15~
                 FPardee and Park, 1948, p. 63.
23
      Peebler mine
 1
             See Russell mine, Montgomery County
```

II. S. GOVERNMENT

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Pee Dee (Spoon) Mine
1
2
      Type:
                   Gold
3
                   Randolph County, 6 miles southeast of Asheboro, —
      Location:
 5-
                         Coarse, nuggety free gold was found in quartz
                    stringer veins in quartz sericite schist. A 100-foot
                    shaft with 200 feet of drifting was sunk around 1900.
                    There was also a 10-stamp mill which burned in the
                    1930's.
 10-
      References: C. B. Brown, 1934, written communication;
11
                    Pardee and Park, 1948, p. 64.
12
    Penman mine
     Type: Gold
     Location: Union County, 1\frac{1}{2} miles northwest of Mineral Springs.
3
          The ores are described under the Bonnie Belle mine. This mine,
 5--
     in the same location as the Bonnie Belle, is part of the "Grand Union
    Gold Mine" tract of 1941 acres.
7
    Reference: Kerr and Hanna, 1888, p. 261.
9
     Person Consolidated mine
 1
     See Durgy mine, Person County. (
 2
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Peters mine

Type: Gold

Location: Davidson County, 2 miles southwest of Silver Hill.

Chalcopyrite and gold-bearing pyrite occur in a quartz-sideriteankerite gangue in quartz veins in a mineralized zone trending northeast-southwest which extends through the Hunt and Cross mines to the
southwest. The country rock is sericite schist which has been
silicified and mineralized in a narrow band. The mine was first worked
in 1830 on a very small scale. Work was also done in 1861-1865, and
1901-1904. During the last period of work, an 85-foot shaft was put
down, and a mill was erected. About 200 tons of ore were treated at
the mill before it closed in 1904. The mine was operated again in
1929 and 1931, when it was opened to a new 44-foot shaft south of the
old shaft.

References: C. B. Brown, 1934, written communication;

Pardee and Park, 1948, p. 62;

Pogue, 1910, p. 112-113.

7

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Pewter mine
     Type: Gold
2
     Location: Union County, near the Phifer and Davis mines.
          Electrum, the dull white alloy of gold and silver containing
 5-
     40 to 70 percent of silver, is found here and is said to have given
     the name Pewter to the mine. The ore probably contains galena
     associated with the silver.
     References: Emmons, 1856, p. 167;
 10-
                  Genth, 1891, p. 13;
11
                  Kerr and Hanna, 1888, p. 189.
12
13
      Peysour Mountain
1
2
      See Cross Mountain, Gaston County. (
10
17
       Pharr mine
 2
       Type: Gold
       Location: Mecklenburg County,
       Reference: Pardee and Park, 1948, p. 63.
  5 --
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Phifer (Phiffer, Price, Mint Hill) mine.
 1
2
      Type: Gold
      Location: Union County, about \frac{1}{2} to 1 mile northwest of the Davis mine
           in the Moore Hill group of mines.
 5-
           The ores are described under the Moore Hill mine. In the 1880's
6
      the mine was worked to a depth of 100 feet and for a length of 400
7
     feet. Some very rich gold stringers were found in the Mint Hill ore
8
     body on the Price tract. These stringers were so close together that
      the whole material was worked for a width of 100 feet and a depth of
      80 feet. A flat seam of barren quartz is said to have cut off the
11
      ore at Mint Hill. Most of the workings were inaccessible in 1906
12
      where the dumps were being tested by J. L. Yont.
13
14
      References: Bryson, 1936, p. 95-96;
 15-
                   Kerr and Hanna, 1888, p. 262-263;
16
                   Nitze and Hanna, 1896, p. 100-103;
17
                   Pardee and Park, 1948, p. 101-102;
                   Pratt, 1907, p. 60-61.
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U. S. GOVENNERS

1 Phifer, Henry , mine Type: Gold 2 Location: Union County, 0.4 mile northeast of Stallings, and 1 mile 3 northwest of Indian Trail. 5-A quartz vein up to 6 feet thick carrying auriferous pyrite in 6 grains and bunches occurs in granite country rock. The mine, which 7 is on a long, narrow tract of 2,000 feet, was worked before 1888, and was reopened in 1933. The 90-foot shaft was flooded in 1934. About 9 three-quarters of a mile northeast of the Henry Phifer mine is an 10-11 opening on a 6-foot wide quartz vein from which rock was quarried for road metal. It shows a few streaks of iron oxides. 12 ٠13 14 References: Brown, C. B., 1934, written communication; Bryson, 1936, p. 93-94; 15--16 Nitze and Hanna, 1896, p. 98; 17 Pardee and Park, 1948, p. 103. 1 Phifer, Sam, mine 2 Type: Gold 3 Location: Union County, 4 miles northwest of Indian Trail. A quartz vein carrying pyrite and chalcopyrite is in pericitie phyllite country rock. Two shafts and pits dating from days of the Civil War were seen. The last work was done in 1933. 7 References: C. B. Brown, 1934, written communication;

Pardee and Park, 1948, p. 65.

## Phillips (Millright) mine 1 Type: Copper, gold 2 Location: Chatham County, 2½ miles northeast of the Chick mine, 3 2.6. miles southeast of Bennett (Harpers Cross Roads) on 4 N.C. Highway 22, and 1.9 miles east on a paved road to a cross-5 roads; then 100 yards north of the crossroads on a branch of Little Indian Creek. 7 The ore is very similar to that at the Chick mine, with chalcocite 9 disseminated through the coarse volcanic tuff. The ore carries gold 10and silver. Azurite and malachite were seen at the surface. 11 mine on the Nat Phillips farm was worked superficially in the 1880's 12 and again in 1901. One 80-foot shaft was sunk on a 12-inch seam of 13 chalcorite which widened to over 3 feet at the bottom. The property 14 was operated in 1942 and 1943 as the Millright mine, and 260 tons of 15~ ore were shipped. Eleven core-drill holes were put down during 1944 16 by the leasor, J. D. Parker, of Samarkand. The drill holes failed 17 to prove much copper ore, but one hole showed appreciable values in 18 gold. 19 20-References: Broadhurst, 1955, p. 17; 21 Conley, 1958, p. 20; rKerrand Hanna, 1888, p. 214; 22 Murdock, 1950, p. 9-10; 23 Pardee and Park, 1948, p. 62; 24 Pratt, 1902, p. 26.

```
1
     Phillips (Lovedahl) prospect
2
     Type: Copper
3
     Location: Jackson County, several hundred yards east of the junction
          of Caney Fork and John's Creek.
          Gossan containing specks of pyrrhotite or pyrite was investigated
     by a shallow pit.
     Reference: G. H. Espenshade, 1944, written communication.
 10-
 1
    Phipps prospect
 2
     Type: Barite
    Location: Alleghany County, 6 miles southwest of Independence, Virginia;
                                                         state line.
          200 yards south of the Virginia-North Carolina boundary.
 5~
          Replacement veins up to 3 feet wide, barite contaminated with iron
6
     stains and fragments of schist occur in quartz-mica schist which may
7
     be a schistose phase of the Grayson Granite Gneiss.
 9
 10-Reference: Edmundson, 1938, p. 50.
11
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Phoenix (Miami, Vanderburg) mine

<sup>2</sup> Type: Gold, copper

Location: Cabarrus County, 6 miles southeast of Concord. The mine is located on the right fork of a woods-farm road which enters a paved road 2.9 miles from its eastward intersection with U. S. Highway 601, 0.6 miles beyond the intersection of Highway 601 and N. C. Highway 49.

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Several parallel quartz veins extend in a northwestery direction along shear zones in fine-grained, greenish-gray diorite, partly altered to mepidote- chlorite schist. The main Phoenix vein averages 15 inches in width, varying from a stringer to 4 feet wide, and for a length of 2,100 feet on the surface. The ore minerals are pyrite, chalcopyrite, free gold, and minor galena, tetradymite, barnhardtite, and scheelite in a gangue of quartz, barite, and calcite-ankerite-siderite. Other veins were known as the Middle and Copper veins, located 200 and 1,000 feet southeast of the Phoenix vein. The Vanderburg mine is an extension of the Phoenix vein. The mine was discovered sometime before 1856; by that time it had been developed to a depth of 140 feet. Kerr and Hanna state that in 1886 the Phoenix had been worked more extensively and for a longer period than any other mine in Cabarrus County. During the 1880's it was operated by Adolph Thies, who extracted the free gold by amalgamation and recovered the remainder with a modyication of the Meass chlorination process, known as the Thies process. During the last period of operation, from 1900 to 1906, the mine was worked by the Miami

U. S. GOVERNMEN

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Mining Co., which is said to have sustained a considerable loss.
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2
     1934 the surface buildings and equipment were gone and the shafts were
     caved. The Phoenix vein was explored by two 600-foot shafts and several
     shallower ones. An ore body 300 feet long has been early stored out above
     the 425-foot level. The other veins were explored by the open cuts and
     shallow workings. Ore from the exidized zone of the Phoenix vein above
     140 feet yielded from one to 3 ounces of gold per ton. Below the
     zone of oxidination the ore contained about 1 ounce of gold per ton and
     1 to 3 percent of copper. The total production of the mine is estimated
     at $400,000 in gold.
11
12
    References: Conley, 1958, p. 18;
13
                  Emmons, 1856, p. 177-178;
14
                 Genth and Kerr, 1881, p. 17; 96;
 15-
                  Kerr and Hanna 1888, p. 284-285;
                             19031 lot see, v. 1, no. 2, p. 174-175;
16
                  Mining Mag., 174-175
                 1854, p. 310;
17
                 Nitze and Hanna, 1896, p. 121-222;
18
19
                 Nitze and Wilkens, 1897, p. 61-62;
                 Pardee and Park, 1948, p. 67-69;
 20-
21
                 Pratt, 1904, p. 11;
22
                Pratt, 1907, p. 59-60.
23
24
 25
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Phoenix mine
1
    Type: Copper
    Location: Guilford County,
          Chalcopyrite and covellite were noted.
 5-
6
    Reference: Genth and Kerr, 1881, p. 104.
      Pierce Mountain Mine
1
2
      Type:
                   Gold
3
                   Randolph County, 8 miles northwest of Asheboro
      Location:
                         The mine was opened by the Pierce Mountain
 5--
6
                   Gold Mining Company in 1903. The ores were low-grade.
7
      References:
                   Pardee and Park, 1948, p. 64;
                   Pratt, 1904, p. 13
9
     Pilot Mountain mine
1
            See Porter mine, Randolph County
2
      Pine Hill mine
1
      Type: Gold
2
      Location: Guilford County, 8 miles southeast of Greensboro.
3
           Quartz veins with limonite gossan were seen in granite country
 5-
      rock.
7
      References: C. B. Brown, 1934, written communication;
                   Pardee and Park, 1948, p. 62.
```

Pine Hill Mine 2 Gold Type: Randolph County, 8 miles southeast of Asheboro, on the Location: southwest flank of Pine Hill, a small prominence south 5-of Pilot Mountain Low-grade gold ore occurs in schistose quartzitic country rock. Some gold occurred along iron-stained seams which show casts of pyrite cubes. In 1934 there 10were one 50-foot shaft, one 75-foot shaft, and a 11 water-filled square shaft. Some work was done here in 12 1936. 13 References: C. B. Brown, 1934, written communication; 14 Bryson, 1937, p. 24; 15-Pardee and Park, 1948, p. 64. 16 17 18 19 20-21 22 23 24 25

```
1
      Pioneer Mills mine
2
      Type: Gold
3
      Location: Cabarrus County, 5 miles southeast of Harrisburg, on
           Caldwell Creek, and 13 miles south of Concord. (
 5-
           Quartz veinScarrying pyrite, chalcopyrite, and gold are in diorite
6
      or a related granitic rock. Other minerals reported in the veins are
7
      molybdenite, chalcofite, barnhardtite, molybdite, and chrysofolla.
      The mine was opened in 1844, and except for brief periods, it has
      been closed since the late 1850's. In 1934 the workings were
 10-
11
      unwatered, surveyed, and sampled under the direction of H. A. Herzog.
12
      The workings consisted of a 147-foot shaft, with drifts at several levels.
      The mine was owned by C. W. Abernethy in 1934.
13
14
                   Bryson, 1936, p. 91;
      References:
 15-
                   Nitze and Hanna, 1896, p. 125;
                   Nitze and Wilkens, 1897 p. 62;
16
                   Pardee and Park, 1948, p. 69.
17
18
      Plonk. John. farm prospect
 1
      Type: Tin
 2
      Location: Gaston County, about 1 mile southwest of the Ormond-Carr
3
           prospect.
 5-
6
           Cassiterite occurs in greisen gangue in muscovite schist and
      gneiss wallrock. The orebody is conformable with the wallrock.
7
```

Reference: Kesler, 1942, table 18.

14

## Mike) Mike Plank, prospect Type: Tin 2 Location: Cleveland County, about $\frac{1}{2}$ mile southwest of the Faires mine. Cassiterite occurs in greisen gangue in muscovite schist and 5gneiss and hornblende schist. A long trench was cut across the formations. In 1942 float ore was seen 1,350 feet northwest of the 7 Plank prospect. References: Keith and Sterrett, 1917, p. 139; 10--Kesler, 1942, table 18. 11 12 Plummer and Charles Plummer mines 1 Type: Gold Location: Mecklenburg County, 7 miles west of north of Charlotte 3 at the old McIntire (Hornet's Nest) house, $\frac{1}{2}$ mile south of Trinity Church, on beatty's Ford Road. The Charles Plummer 5-mine is $\frac{1}{2}$ mile S. 50°W. from the Plummer. Much rusty honeycomb vein quartz blackened along the joints with manganese oxides was seen. Silicified limonitic ore and abundant sulfides occur at shallow depths near a small stream. Many 10~ 11 old shafts and pits were seen in 1934. 12

References: J.V. Lewis, 1934, written communication;

Pardee and Park, 1948, p. 63.

```
Plyler mine
1
     Type: Gold
2
     Location: Davidson County, 2 1/2 miles north of Silver Hill. -
3
     Reference: Pardee and Park, 1948, p. 62.
 5-
      Pocahontas mine
 1
            See Mastodon mine, Granville County.
2
    Point mine
    Type: Gold
    Location: Mecklenburg County, 1 mile west of Charlotte on the north
         end of Davidson Hill, a ridge 1/2 mile long.
 5-
         In the 1880's the mine was developed to a depth of 160 feet and a
    10-stamp mill was in operation. The oxidized ores extended much deeper
    in this mine than was usual in this region, presumably at least to 160
    feet, for it is stated that oxidation to a depth of 150 feet is not
    unusual.
11
    References: Kerr and Hanna, 1888, p. 286-287;
12
                 Nitze and Hanna, 1896, p. 126;
13
                 Pardee and Park, 1948, p. 63.
14
     Ponder mine
     Type: Gold
     Location: Polk County, South Mountain area.
```

Nitze and Hanna, 1896, p. 174.

Reference:

```
Poole mine
1
     Type: Copper
2
     Location: Person County, 1/4 mile west of the Mastodon mine.
3
           A prominent quartz vein showing copper staining at the surface
     was explored by a 45-foot shaft and 2 shallow pits.
6
7
     Reference: Kerr and Hanna, 1888, p. 217-218.
8
1
     Poor Ridge mine
2
     Type: Copper
     Location: Jackson County,
 5-
     Reference: Weed, 1911, p. 137.
     Poplan mine
 1
      See Crosby mine, Cabarrus County.
16
 1
       Poplin mine
       Type: Gold
       Location: Mecklenburg County, 10-11 miles south of east of Charlotte,
 3
            [and] south of the Shaffer mine, and \frac{1}{2} mile southwest of Mungo's
 4
  5-
             store.
             This is one of a series of quartz veins trending northwest-
 7
 8
        southeast.
       References: Nitze and Hanna, 1896, p. 144, 145;
 10-
11
                     Pardee and Park, 1948, p. 63.
```

1 Porter (Johnson, Pilot Mountain) Mine 2 Type: Gold Randolph County, 8 miles southeast of Asheboro Location: 5 --Gold occurs in a quartz lens in soft decomposed tuff or sericite schist. Some work was done here in 1936. The workings consist of a pit 50 feet deep and 40 feet long and a group of 3 shafts about 500 feet southwest of the pit. 10-C. B. Brown, 1934, written communication; References: 11 Bryson, 1937, p. 24; 12 Pardee and Park, 1948, p. 64. 13 14 15-16 17 18 19 20---21 22 23 24 25-

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Portin (Sturgess) mine

Type: Gold

Location: Franklin County, 18 miles east-northeast from Louisburg, south of Ransom's Bridge, near Shocco Creek and 1 1/4 miles from Fishing Creek.

Quartz veins up to 2 feet thick running in all directions occur in weathered diorite sills called the "white belt", so called because of the bleached appearance of the weathered diorite, and in metamorphosed sericite schist which weathers into a red sticky saprolite clay. The upper sill is 9 feet thick and underlies an area of several acres. The lower sill is 14 feet thick. The sills dip in a westerly direction at a low angle. The mineralization is thought to be related to an intrusive mass of which the sills may be offshoots. The quartz veinlets are more numerous in the sills because, having been fractured more extensively than the schist, they offered an easier path to the mineralizing solutions emanating from below. The gold content of the sills averages about 0.15 ounce per ton.

Gold has been mined here since about 1835. An area of about

50 acres at the Poitis mine has been washed for gold to a depth of

5 to 20 feet, according to Mr. P. G. Sturgess, whose family had once

own ed the mine. In 1935 the Norling Mining Company acquired the

Portis property and 955 acres with the adjoining White House property.

The company expected a 40-stamp mill, but it was not suitable for the

ores, and operated only a short while. In 1936 the property was

```
taken over by R. W. Craig and A. L. McNeer, who were prospecting and
 1
     sampling to determine the value of the placer material for dredging.
 2
     Authentic records of production are available, but popular estimates
      of gold recovered range from several hundred thousand to more than
      one million dollars.
  5 -
 6
      References: Bryson, 1936, p. 54-62;
                   Bryson, 1937, p. 25-26;
 8
                   Crosby, 1901, p. 855-856;
                   Kerr and Hanna, 1888, p. 241;
 10-
                   Nitze and Hanna, 1986, p. 25-26;
11
                   Nitze and Wilkens, 1897, p. 43-45;
12
                   Pardee and Park, 1948, p. 73-74,
13
                  Stuckey, 1965, p. 300-301.
14
      Powell mine
 1
            See New Sawyer mine, Randolph County
 2
      Price mine
 1
           See Prince mine, Polk County
 2
     Price mine
  1
      See Phifer mine, Union County.
  2
       Prichett mine
  1
       Type: Gold
 2
       Location: Randolph County, 1 mile northeast of Asheboro.
 3
       Referemence: Pardee and Park, 1948, p. 64.
```

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Prim mine
1
     Type: Gold
    Location: Mecklenburg County, 5 to 10 miles west to northwest of
          Charlotte.
 5-
    References: Nitze and Hanna, 1896, p. 132;
6
                  Pardee and Park, 1948, p. 63.
7
     Praice (Price) mine
1
2
     Type: Gold
     Location: Polk County, South Mountain area at Sandy Plains.
          Gold placers.
     Reference: Nitze and Hanna, 1896, p. 174.
7
      Providence mine
1
      Type: Gold
2
      Location: Mecklenburg County, 12 miles south of Charlotte.
 5 --
           The ore carries chalcopyrite, gold, pyrite, and magnetite.
8
      Reference: Genth and Kerr, 1881, p. 111.
```

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Pruit, S. I., mine
 1
 2
       Type: Gold
       Location: Mecklenburg County, 2 miles southeast of Huntersville.
 3
                   Pardee and Park, 1948, p. 63.
  5 ---
       Reference:
     Puckett mine
 1
     Type: Gold
 2
     Location: Guilford County, 5-6 miles southwest of Greensboro, at the
3
          southern end of a 900 acre tract comprising the Fisher Hill, and
          Millis Hill, and Puckett mines.
 5-
6
          The mine is on the same north-south system of quartz veins in
7
     granite country rock as the Fisher Hill and Millis Hill mines.
     veins at the Puckett mine carry considerably larger amounts of
     Chalcopyrite and pyrite than do those to the north.
 10-
11
     References: Nitze and Hanna, 1896, p. 110-111;
12
                  Pardee and Park, 1948, p. 75.
13
     Puett mine \
1
     Type: Gold
     Location: Gaston County, 2 miles southeast of Belmont.
3
     Reference: Pardee and Park, 1948, p. 62.
      Pugh mine
            See Gold Bowl mine, Randolph County
```

```
Putnam (Stearns) mine
1
    Type: Gold
    Location: Union County,
3
         The mine was being worked in 1887.
 5--
6
    Reference: Kerr and Hanna, 1888, p. 261.
7
     Quarke City mine
1
      Type: Gold
2
     Location: Cabarrus County, 1/4 mile south of the Barnhardt mine, and
3
           3 miles north of the Tucker mine.
 5-
          A quartz vein from 2 to 5 feet wide carried much pyrite with a little
      copper. The ore is low grade. In the 1880's the mine was opened by
7
      three shafts, 40, 60, and 80 feet deep.
      References: Nitze and Hanna, 1896, p. 123;
 10-
                   Nitze and Wilkens, 1897, p. 62;
11
                   Pardee and Park, 1948, p. 71.
12
21
      Queen mine /
      Type: Lead
2
3
      Location: McDowell County, .
      Reference: Kerr and Hanna, 1888, p. 202.
```

Queen mine Type: Gold Iocation: Mecklenburg County, this may be. the Queen of Sheba rine, 21/4 miles northeast of Charlotte. 5 --Gold, pyrite, and chalcopyrite were noted in the ore. 7 Reference: Genth and Kerr, 1881, p. 111. Queen of Sheba mine Type: Gold Iocation: Mecklenburg County, 2-1/4 miles northeast of Charlotte, at Woodside Ave., between Duncan and Lydia Aves, 2,000 feet east of the King Solomon mine. Rusty, honeycomb quartz carrying specks of native gold, iron oxides, pyrite, and manganese oxides occurs in sheared granite. A 14 foot shaft was seen in 1934. 10-References: J.V. Lewis, 1934, written communication; 11 J.T. Pardee, 1934, written communication; 12 Pardee and Park, 1948, p. 63. 13 14 23 24

```
Raleigh mine
1
     Type: Gold
2
     Location: Guilford County, continuation of the Twin mine.
3
       A Quartz vein carrying chalcopyrite and gold in granite is
 5 ~
    a continuation of the vein at the Twin mine.
6
                 Emmons, 1856, p. 203-204;
     References:
                  Kerr and Hanna, 1888, p. 206;
                  Nitze and Hanna, 1896, p. 111.
 10-
11
      Ramsay, M., mine
 1
      Type: Gold
      Location: Cherokee County,
 3
           Gold was produced here in 1903.
  5-
      Reference: Pratt, 1904, p. 11.
 7
19
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1
      Ramseur Mill prospect
      Type:
            Tin
2
     Location: Gaston County, 2 miles northeast of Long Creek Church.
3
          Cassiterite occurs in a greisen streak 1 to 2 feet thick along
 5--
      the northeast wall of a large pegmatite body in hornblende schist
     country rock. A trench and shaft not more than 30 feet deep were
7
     made in 1903.
     References: Keith and Sterrett, 1918, p. 143-144;
 10-
                  Kesler, 1942, table 18:
11
                  Pratt and Sterrett, 1904, p. 29.
12
       Randleman mine
       Type: Gold
 2
       Location: Rowan County, southwest of Salisbury, and east of the
            Southern Railroad.
  5-
       References: Nitze and Hanna, 1896, p. 117.
 6
19
     Randolph mine
 1
           See Allred mine, Randolph County
 2
 1
     Randolph mine
 2
     See Gold Hill mine, Rowan County.
 25-
```

```
Ray (Rhea, Rea, Baltimore and North Carolina) mine
1
      Type: Gold, copper
2
      Location: Mecklenburg County, 9 to 9\frac{1}{2} miles southeast of Charlotte,
3
           one to two miles northwest of Mathews, and comprising 360 acress
           of land.
 5-
           Five veins with an aggregate length of about 4 miles were
7
      explored. Oxidized brown ore was mined from the South and Phifer
      Grove veins. The Ray vein carried auryirous chalcopyrite and pyrite.
      The copper content of the ore increased below a depth of 50 to 70
 10-
             The Baltimore and North Carolina Mining Company operated the
11
      mine during the $1880's. The South vein was worked to a depth of 60
12
      feet, and the Phifer Grove vein to a depth of 40 feet. The Ray vein
13
      was opened by 6 shafts, the deepest being 250 feet. By 1887 most of
14
      the ore down to the 150-foot level had been stoped out.
 15-
16
      References: Bryson, 1936, p. 125;
17
                    Genth and Kerr, 1881, p. 111;
18
                    Kerr and Hanna, 1888, p. 208, 210, 302;
19
                    Mining Magazine, 1854, v. 2, no. 3, p. 307;
 20-
                    Nitze and Hanna, 1896, 143-144;
21
                    Pardee and Park, 1948, p. 63.
22
23
     Rayfield prospect
     --see Jenkins Farm prospect, Gaston County. (
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U. S. GOVERNING

1 Redding Mine 2 Gold Type: 3 Randolph County,  $4\frac{1}{2}$  miles northeast of Asheboro Location: 5-Coarse, nuggety gold is carried with some chalcopyrite in quartz stringers and veinlets which 7 cut porphyritic rhyolite country rock. Gold is also present in a sheet of alluvium 3 to 9 feet thick and 50 feet wide composed of rounded pebbles in a clay 10matrix. The quartz veins were worked in 1906. In the 11 1930's gold was produced from placers in the alluvium. 12 References: C. B. Brown, 1934, written communication; 13 Pardee and Park, 1948, p. 88; 14 Pratt, 1907, p. 44. 15-Red Hill mine 1 Type: Gold 2 Location: Moore County, 1 mile southwest of Hemp; and 600 feet west 3 of the Cagle mine. 5 --Gold is disseminated through sericite schist and felsic tuff country rock. This mine was last operated in the early 1900's. was a shaft 100 feet deep. A drift from this shaft intersected the side of the hill 250 feet N.15°E. of the shaft. Gold ore was treated at the Clegg mine mill. 10-11 Conley, 1962a, p. 25; References:

Pardee and Park, 1948, p. 64.

Redman (Redmond, Fines Creek) mine

Type: Lead-zinc

Location: Haywood County, about 12 miles north of Waynesville in the valley of Fines Creek, and about \frac{1}{2} mile north of Waterville Lake at Hepco on the Pigeon River.

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The deposit is a system of disconnected sulfide-bearing quartz lenses lying in a chloritized shear zone near the contact of granitic gneiss and mica schist, possibly equivalents of the Max Patch Granite and the Snowbird Formation. The ore consists of massive galenasphalerite ore, and more abundant quartz-galena-sphaleritechalcopyrite-pyrite ore. Near the surface the sulfides have been oxidized to a gray, gritty cerussite. The higher grade ore carried

about 1.5 percent zinc, 6 to 7 percent lead, and 0.5 percent copper.

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The deposit was discovered in 1905 by R. J. Rathbone, who synk a shallow shaft at that time. Another shaft was sunk at the north end in 1925, and in 1929-30 the U.S. Smelting, Refining and Mining Co. deepened that shaft to 40 feet. In 1934-35 open-cut work was begun and was completed in 1939-40 by the Haywood Mining Corp. The mine was idle until 1943, when the company obtained a loan from the

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22 the open cut.

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24

and 6.5 percent zinc were shipped to the Ozark Smelting and Refining Co., Coffeyville, Kansas.

In 1940, 44.5 tons of hand-picked ore assaying 12.1 percent lead

Reconstruction Finance Corp. and began a drift from the north end of

```
References: Espanshade, Staatz, and Brown, 1947;
1
                   Hunter and Gildersleeve, 1946, p. 48,
2
                    Stuckey, 1965, p. 323.
3
     Red Spring mine
1
     Type: Gold
     Location: Polk County, South Mountain area.
           There were three gold-bearing quartz veins.
 5--
...6
     References: Bryson, 1936, p. 143;
7
                   Nitze and Hanna, 1896, p. 174.
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 15--
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Reed (Reid) mine

Type: Gold

Location: Cabarrus County, 10 miles southeast of Concord and 2 1/2 miles south of Georgeville.

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A greenstone sill intruded into types of the volcanic series forms the crest of a ridge trending slightly east of north that rises 50 to 75 feet at the east of Little Meadow Creek. Residual and Elluvial placer deposits have been worked over the floodplain of the creek for a width of 250 feet and for a length of more than one mile. Quartz veins on the hill above the creek form a broad mineralized zone up to 200 feet wide.

The earliest recorded discovery of gold in North Carllonia was at the Reed mine when a 17 pound gold nugget was found in 1799 in Little Meadow Creek. Gold nuggets recovered between 1803 and 1835 has a total weight of 115 pounds, and individually they weighed from 1 to 24 pounds. The lodes were not mined until after 1831; before 1855 a shaft had been sunk on one quartz vein to a depth of 90 feet. Lode mining was carried on intermittentle from 1881 to 1887. A 10-stamp mill was erected about 1895 and was operated for several years. In 1934 a few mines were washing the residual placer deposits and were recovering about 50 cents per day. The total production of the mine is not known but it is estimated that the production for the period from 1803 to 1835 was more than \$1,000,000.

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```
Kerr and Hanna, 1897, p. 264-265;
     References:
1
                  Nitze and Hanna, 1896, p. 124;
                  Nitze and Wilkens, 1897, p. 61;
3
                  Pardee and Park, 1948, p. 69-70;
                  Partz, August, 1854, The Beed Mines, N. O.,
 5~
                  Mindre Mag., let cor., v. 3, p. 161-168,
                   Stuckey, 1965, p. 302-303.
7
 1
     Reed, Joel, mine
      Type: Gold
3
      Location: Cabarrus County, one-quarter mile east of Concord.
           The mine was worked in pre-Civil Was days when several shafts were
 5--
       on ounts Frincers
      sunk in sheared bittite granite, on stringers in quertz.
7
      References: C. B. Brown, 1934, written communications;
                   Nitze and Hanna, 1896, p. 121;
 10-
                   Pardee and Park, 1948, p. 63.
18
1
      Reese mine
      Type: Gold
      Location: Gaston County, 1-3/4 miles southwest of Stanley.
 5--
      Reference: Pardee and Park, 1948, p. 62.
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Gold

Location: Rowan County, 5 to 6 miles southeast of Salisbury,

and about 1 mile east of the Gold Hill Railroad, on

the Yadkin River; 1 mile east-southeast of Granite

Quarry, —

carrying pyrite, with a little chalcopyrite and pyrrhotite. In the 1850's oxidized ore near the surface, was worked for gold. In 1881 a Davis chlorination plant was erected, but it soon burned. Next a concentrating plant was built, which operated for 2 years before burning. At that time development work included 3 shafts 193, 165, and 43 feet deep, and numerous drifts which explored a block 150 to 165 feet deep and 500 feet long. In 1894 the mine was reopened and worked until the fall of 1895, the ore being treated in a 20-stamp mill and a barrel chlorinator. The mine became idle in 1895 after experiments with cyanide were unsuccessful. In 1934

none of the workings was accessible. Sampling done at that time showed that the mine dumps included considerable material containing 0.05 to 0.13 ounce of

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gold per ton. The concentrates assayed l\frac{1}{2} to 2 ounces
1
                     gold per ton, but the total recovery was only 1/5 to
2
3
                     1/4 ounce per ton.
                     C. B. Brown, 1934, written communication;
       References:
 5-
                     Kerr and Hanna, 1897, p. 281;
6
                     Nitze and Hanna, 1896, p. 118-120;
7
                     Nitze and Wilkens, 1897, p. 117;
                     Pardee and Park, 1948, p. 91.
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Reynolds Mine 1 2 Type: Gold 3 Location: Montgomery County, 4 to 6 miles northeast of Troy — 5-Copper and silver sulfide ores were found at a depth \$60 feet in quartz veins in manganese-stained soft sheared and silicified tuff. Gold telluride is reported by Emmons. The Reynolds and Carter mines are thought to be on the same vein, which has been traced 10for a length of  $2\frac{1}{2}$  miles. The mine was discovered 11 by E. Reynolds in 1851. In 1896 the mine had been 12 worked to a depth of 80 feet. In 1934 a 100-foot shaft 13 was found. It is estimated that the production was 14 \$360,000. 15 References: C. B. Brown, 1934, written communication; 16 Emmons, 1856, p. 168; 17 Kerr and Hanna, 1888, p. 247; 18 Nitze and Hanna, 1896, p. 80; 19 Nitze and Wilkins, 1897, p. 52; 20-Pardee and Park, 1948, p. 63. 21 22 23 24 25

```
1
      Rhea mine
 2
       See Ray mine, Mecklenburg County.
      Rhodes mine
 1
       Type: Gold
 2
 3
       Location: Gaston County, 2 miles southeast of Belmont.
            The orebody is auriferous mica gneiss. Gold is found in a bed
  5--
      of ferruginous, decomposed, schistose mica gneiss. Galdna is
 6
      occasionally found in the ore bed.
 7
            The mine has been worked to a depth of 100 feet and for a
 9
       length of 300 feet.
 10-
` 11
      References:
                   Bryson, 1936, p. 129;
                    Kerr and Hanna, 1888, p. 303;
12
                    Nitze and Hanna, 1896, p. 148;
13
                    Pardee and Park, 1948, p. 62.
14
17
      Rhyne mine
 1
      Type: Gold
 2
      Location: Gaston County, 17 miles west of Charlotte and 2 miles
 3
           east of Stanley.
  5-
      References: Nitze and Hanna, 1896, p. 148;
                    Nitze and Wilkens, 1897, p. 66;
 7
                    Pardee and Park, 1948, p. 62.
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U. S. GOVERNIN ...

#### າ Rhyme Estate prospect

Type: Tin

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Location: Lincoln County, 2 miles southeast of Lincolnton.

Cassiterite occurs in lens-shaped greisen veins in mica schist.

The American Consolidated Tin Mines did exploration and development work on the Rhyme estate from 1930 to 1936. Two trenches 150 feet long and 15 to 20 feet wide were made and 6 well-dyined ore bodies were discovered.

Reference: Bryson, 1937, p. 43-44.

### Richardson mine

Type: Gold

Location: Moore County, 2½ miles south of Hemp, and 1,500 feet southwest of the Jenkins mine.

The ore body appears to be a continuation of the Jankins vein, about 6 feet wide and consisting of highly silicified tuff containing cross-cutting quartz veins. The mine was first worked by the Marshall Mining Company in 1860, and last in 1906 by Steward and Hewes. The vein was opened by 9 shafts for a distance of 1/4 mile.

References: Conley, 1962a, p. 26;

Pardee and Park, 1948, p. 64.

```
Rich Cog mine
1
            See Appalachian mine, Montgomery County
2
1
    Rich Knob prospect
2
    Type: Copper
    Location: Ashe County, on Rich Knob, 1 mile west-northwest of the
         Gap Creek mine.
 5-
          The ore is similar to that of the Gap Creek mine, with quartz
    in gneiss
veins in the Roun Fermation carrying copper minerals and gold in red
    oxides of copper and iron.
    Reference: Kerr and Hanna, 1888, p. 225.
     Riding mine
     Type: Gold
2
     Location: Polk County, South Mountain area.
     Reference: Nitze and Hanna, 1896, p. 174.
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Riggon Hill	
Type:	Gold
Location:	Montgomery County, 3 miles east of Eldorado and/or
	1 mile northeast of Ophir(
	Rich gold and silver ore is said to have
	occurred in a quartz vein $2\frac{1}{2}$ feet thick conformable
,	with the schistosity of the argillaceous slate countr
	rock. The mine had been opened by a 100 foot shaft
	in 1896.
References:	C. B. Brown, 1934, written communication;
	Bryson, 1936, p. 74;
	Nitze and Hanna, 1896, p. 77;
	Nitze and Wilkens, 1897, p. 53;
	Pardee and Park, 1948, p. 63.
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Ritter (McDonald, Teisson) mine

Type: Gold

Location: Moore County, 4 miles northeast of Carter, and ½ mile northwest of McConnell, and also .4 mile northwest of the Donaldson (Cotton) mine.

The ore body is a highly silicified and sericitized felsic tuff three feet wide striking N.10°E. and dipping 30°NW. The mine was first operated before 1890, under the name of Teisson. There are two shafts about 520 feet apart. The northeast shaft is more than 100 feet deep.

References: Conley, 1962a, p. 26;

Pardee and Park, 1948, p. 64.

#### Roaring River placer

Type: Gold

Location: Wilkes County, on Roaring River.

Reference: Pardee and Park, 1948, p. 65.

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Robbins mine 1 Type: Gold Location: Randolph County, near the road between Asheboro and Hunt's 3 store. 5-Above 60 feet the ore was oxidized and in soft reddish brown 6 decomposed slate; below that level hard bluish slates carried 7 aurigerous pyrite. The oxidized ores were worked before 1856. 8 Reference: Emmons, 1856, p. 132-133. 10-11 Robeson mine 1 Type: Gold 2 Location: Orange County, 12 miles northwest of Chapel Hill. 3 A northeast striking quartz vein from 6 to 22 inches wide has 5been traced for a distance of 4 miles. The quartz is cellular, vitreous to saccharoidal and assayed from \$6 to \$52 per ton. The 7 deposit was discovered in 1890. In 1895 a prospect shaft was sunk 30 feet on the underlay, and the vein widened from 6 inches on the surface to 22 inches at the bottom of the shaft. 10-11 References: Bryson, 1936, p. 67;

Nitze and Hanna, 1896, p. 53.

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1
      Robinson mine
      Type: Gold
2
      Location: Gaston County, adjoins the Duffie mine on the southwest,
3
           about 5\frac{1}{2} miles northeast of Gastonia.
 5-
            Gold with pyrite occurs in a quarta vein.
7
                    Kerr and Hanna, 1888, p. 304;
      References:
                    Nitze and Hanna, 1896, p. 148;
                    Nitze and Wilkens, 1897, p. 66;
 10-
11
                    Pardee and Park, 1948, pp. 62.
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U. S. GOVERNOUS TEN

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Rocky River (Jake Shin, Tom Shin) mine
1
2
     Type: Gold
     Location: Cabarrus County, 10 miles southeast of Concord on Rocky River;
3
          one mile southwest of Georgeville.
 5-
          Lenticular quartz veins carrying pyrite, galena, sphalerite, chalcopyrite,
     and gold lie in peritized and silicified sericitic schist of volcanic origin.
7
     The veins are up to three feet wide and form a disconnected group in a
     narrow belt 700 to 800 feet long. The highest gold values were found in
- 9
     ore with high galena content. Silver and arsenic were also noted in the
     ore. The silicified schists enclosing the quartz veins are impregnated
11
     with sulfides and constitute low-grade ores.
12
          Although the mine was worked shortly after the Civil War, little
13
14
     is known of its early development. In the 1880's W. A. Smith of Concord
     put down 6 shafts, Shaft No. 1 was further explored by Mr. Wayne
     Darlington, M. E., in 1895. It reached a depth of 130 feet with 200 feet
16
     of drifts. In 1934 nothing was seen but dumps and partly filled pits and
17
     trenches, all overgrown. Samples of the ore are reported to assay
18
     from a quarter ounce to 3 ounces of gold per ton, and from a trace to
19
    $7.00 in silver.
 20-
     References: Kerr and Hanna, 1888, p. 191; 265;
 1
                  Nitze and Hanna, 1896, p. 91-93;
 2
                  Nitze and Wilkens, 1897, p. 61;
 3
                  Pardee and Park, 1948, p. 71.
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U. S. GOVERNATION ...

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1
     Rogers mine
      Type: Gold
     Location: Cabarrus County, near Concord.
     Reference: Pardee and Park, 1948, p. 62.
6
      Rogers mine
1
      Type: Gold
      Location: Mecklenburg County,
3
           Gold and pyrite were noted in the ore.
 5-
7
      Reference: Genth and Kerr, 1881, p. 111.
14
    Rogers, Grady, mine
    Type: Gold
    Location: Union County, 2 1/2 miles northwest of Waxhaw, near the South
         Carolina State line.
 5-
         Schist containing scattered grains of galera and streaks of pyrite
6
    and chalcopyrite on foliation planes was exposed for a width of 50
    inches. The ore was exposed in a 40-foot shaft.
 Reference: Pardee and Park, 1948, p. 104.
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Rogers, Wiley, mine
 1
      Type: Gold
 2
      Location: Union County, 3 miles northwest of Waxhaw, very near the
 3
           South Carolina state line.
  5-
           A 4 to 6 inch quartz vein rich in free gold strikes northeast-
      ward across the cleavage in schist country rock of the volcanic series
 7
      A 60-foot inclined shaft was sunk on the vein in 1934, but the vein
      did not increase in width with depth, and the gold values decreased.
      A 5-stamp mill which operated for about 4 months treated mostly
 10-
      surface quartz.
11
12
      References: C. B. Brown, 1934, written communication;
. 13
                   Bryson, 1937, p. 18;
14
                   Pardee and Park, 1948, p. 104.
 15-
       Roseman mine
  1
       Type: Gold
  2
       Location: Rowan County, southwest of Salisbury, east of the Southern
  3
       Railroad.
   5 ---
                     Genth and Kerr, 1881, p. 116;
       References:
  6
                     Nitze and Hanna, 1896, p. 117.
  7
       Ross mine
  1
             See New Sawyer mine, Randolph County
  2
                                               U. S. GOVEDNING
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Ross prospect
1
      Type: Tin
2
      Location: Cleveland County, 2/3 mile southeast of Crocker.
3
           Cassiterite occurs in greisen gangue in a 20-foot wide pegmatite
 5-
      dike in muscovite schist and gneiss. In 1903 Capt. S. S. Ross sandK
6
      a pit on the southeast side of the pegmatite dike.
7
8
      References: Keith and Sterrett, 1917, p. 142;
                   Kesler, 1942, table 18; plate 39
10-
     Southwest of Ross prospect
1
2
      Type:
             Tin
3 ′
      Location: Cleveland County, 1,475 feet S. 47° W. of the Ross
           prospect.
 5-
6
           Cassiterite occurs in greisen gangue in muscovite schist and
7
      gneiss.
8
9
     Reference: Kesler, 1942, table 18; plate 39.
21
      Roswell mine
      Type: Gold
3
      Location: Mecklenburg County.
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Reference: Genth and Kerr, 1881, p. 111.

The ore carries gold and pyrite.

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Royster mine

See Big America mine, Granville County.

Rudisil mine

Type: Gold

Location: Mecklenburg County, 1 mile southwest of the intersection of Tryon and Trade Streets in Charlotte, and 2,500 feet southwest of the St. Catherine mine.

A quartz lode carrying pyrite and gold with a little chalcopyrite occurs between granite and schist wallrocks. The schist is interpreted by Park as a roof pendant in the intrusive granite. The ore occurs in lenses about 5 feet thick, 10 to 20 feet long and 10 feet deep which appear to have formed where the lode flattens, owing to a roll or a split in the lode. Gold was first discovered on the property in 1829. The following year the Mecklenburg Gold Mining Company began operations under the direction of the Chevalier de Rivafinoli, who operated the mine for several years. In 1837 the mine was purchased by John E. Penman, who operated it until the Civil War. The mine was again operated from 1880 to 1887 and from 1905 to 1908 by George E. Price. In 1934 the mine was reopened by the Carolina Engineering Co., and in 1935 the Rudisil Mining Corp. was formed to develop the mine, erect a flotation mill, and equip a laboratory. The mine, which has been developed to a depth of 350 feet through 3 shafts, was unwatered to a depth of 250 feet during these operations. Gold was produced through 1938. The total production of the mine has been estimated at more than 50,000 ounces of gold.

```
Bryson, 1936, p. 110-114;
      References:
1
                    Bryson, 1937, p. 16;
2
                    Emmons, 1856, p. 175-177;
3
                    Kerr and Hanna, 1888, p. 287-289;
                   Murdock, 1950(?), p. 6;
 5--
                    Nitze and Hanna, 1896, p. 126-127;
                   Nitze and Wilkens, 1897, p. 64;
                   Pardee and Park, 1948, p. 77-79;
                   Pratt, 1907, p. 66-68;
                   Stuckey, 1965, p. 305-306,
 10-
11
12
    Rufty mine
    Type: Gold
2
    Location: Catawba County, at Catawba Station.
 5- Reference: Nitze and Hanna, 1896, p. 151.
18
     Rumfeldt mine
     See McLean mine, Gaston County.
21
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1
      Rumple (Rumpler) Mine
2
      Type:
                   Gold, copper
3
      Location:
                   Rowan County, 1 mile north of Gold Hill, -
 5-
                        A copper vein carrying azurite was opened in
                   sheared, schistose fragmental acid tuff similar to that
7
                   at Gold Hill. A 60-foot shaft and several other pits
                   and shafts were opened by the Whitney Company.
      References: C. B. Brown, 1934, written communication;
 10-
                   Pardee and Park, 1948, p. 64.
11
12
      Rush mine
1
            See Dowd mine, Randolph County.
 15-
     Russell mine
     Type: Gold
2
     Location: Davidson County,
          Gold and pyrite were noted in the ore.
 5-
6
     Reference: Genth and Kerr, 1881, p. 101.
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# Russell (Palmer, Peebles) Mine

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Type: Gold, lead, zinc

Location: Montgomery County, 2 to 3 miles north of Eldorado, in

the northwest corner of Montgomery County, near the

Randolph County line

Gold-bearing sulfide ore occurs in mineralized zones in a hard siliceous argillaceous slate or schist. The entire mass is gold-bearing, but only certain parts of it are rich enough to work. Rich seams appear and disappear abruptly and the ore is difficult to distinguish from waste. Six parallel ore zones or leads which are 10 to 70 feet wide and strike northeast parallel to the schistosity have been mapped. The ore has been assayed at 0.10 ounce of gold and 0.05 ounce of silver per ton. The schists carry 2 to 4 percent pyrite with traces of chalcopyrite. The workings include several open pits and underground workings that attain a depth of 200 feet or more. The largest pit, the Big Cut, is about 300 feet long, 150 feet wide, and 60 feet deep. The 6 leads are known as the Little Lead, Big Cut, Riggins Hill Lead, Soliague Lead, Walker Lead, and Laurel Hill Lead. There was a 40-stamp mill on the property in 1894. The mine was idle at that time.

```
1
                    In 1895 the mine was owned by the Glenbrook Mining
2
                    Company. In 1896 the American Cyanide Gold and Silver
                    Recovery Company of Denver, Colorado, erected a 30-ton
                    cyanide plant. The total production of the mine is
 5-
                    said to have exceeded $300,000.
6
       References:
                    Bryson, 1936, p. 72-73;
7
                    Kerr and Hanna, 1888, p. 248-251;
                    Nitze and Hanna, 1896, p. 74-76;
                    Nitze and Wilkens, 1897, p. 52-53;
 10-
                    Pardee and Park, 1948, p. 83.
11
      Ruth mine
 1
            See Spencer mine, Randolph County
 15-
 1
       Rymer mine
         see Reimer mine, Rowan County
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### St. Catherine (Charlotte, McCombs) mine

Type: Gold

Location: Mecklenburg County, in the city of Charlotte, on Post Street, 125 feet northwest of the main line of the Southern Railway, and 2,500 feet N. 25° E. from the Rudisil mine.

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Two parallel veins lie next to the granite walls of a belt of sericite schist. At a depth of 165 feet the veins unite to form a single vein. The schist bodies may be interpreted as roof pendants in the intrusive granite. Below 200 feet large bodies of massive concentrating ore consisting of gold-bearing pyrite and quartz mixed with seams of schist were found. The St. Catherine and the Rudisil mines are thought to be near opposite ends of the same vein. but prospecting between them has disclosed nothing of promise. The St. Catherine is said to have been the first mine opened in Mecklenburg County. It was shown on a map made in 1826 as an operating mine. The mine and mill on Sugar Creek were operated until 1836 by the Chevalier de Rivafinoli along with the Rudisil. 1848 the mine was controlled by Capt. Charles Wilkes, who observed that poachers had gouged over the surface for gold-bearing material until the property resembled a "Mabbit warren." Power for the mill later called the Bissells mill, was obtained from a 12-foot dam on Sugar Creek that made a lake 130 acres in area. The mine was active through the 1880's, and from 1905-08 it was operated jointly with the Rudisil. The main shaft of the mine has a depth of 370 feet.

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1935 most of the material in the dumps had been removed for use in
  1
        surfacing streets.
 2
 3
       References: Bryson, 1936, p. 114-116;
                     Kerr and Hanna, 1888, p. 289-292;
  5--
                     Nitze and Hanna, 1896, p. 129-131;
                     Nitze and Wilkins, 1897, p. 64;
 7
                     Pardee and Park, 1948, p. 79-80;
                     Pratt, 1907, p. 66-68.
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U. S. GOVERNES

## Sam Christian Mine

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Type:

Location:

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Gold

Montgomery County,  $4\frac{1}{2}$  miles west of Wadeville, or 12 miles east of Albemarle and 3 miles east of Swift Island Ford; about 9 miles southwest of Troy,

This was a placer mine and was known especially for the remarkably large and fine nuggets it yielded. Forty nuggets which were found in 1880 ranged in weight from 5 to 1,024 dwt. and had a total weight of 4,200 dwt. The gold was found in nugget form and rarely as dust in "channels" in alluvial gravel 1 to 3 feet thick and deeply covered with soil. The principal channels were the Dry Hollow, Sam Christian Cut, and California Cut. The country rock underlying the gravel is argillaceous slate broken through by masses of volcanic breccia and hornstone which contained small quartz veins. The mine was operated by the Sam Christian Company of London, England, by hydraulic methods with water pumped from the Yadkin River about  $2\frac{1}{2}$  miles distant. Attempts at deep mining on the quartz veins failed. The mine was last operated in 1893.

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1
      References: Bryson, 1936, p. 75;
2
                   Kerr and Hanna, 1888, p. 247-248;
3
                   Nitze and Hanna, 1896, p. 80-82;
                   Nitze and Wilkens, 1897, p. 52;
 5
                   Pardee and Park, 1948, p. 85.
    Sanders (Saunders) mine
    Type: Gold
2
    Location: Cabarrus County, 4 miles northwest of Georgeville.
         Fine gold was reported in narrow quartz stringers in diorite. A
 5-
    15-foot shaft was seen in 1934.
7
    Reference: C. B. Brown, 1934, written communication.
     Sandy Bottom mine
1
     See Stackhouse mine, Madison County.
2
18
     Sandy Level Church prospect
1
     Type: Gold
     Location: Rutherford County, a few hundred yards behind the church,
3
          3.1 miles northwest of Sunshine.
 5-
          An old gold mine dump was seen here.
7
     Reference: Conley, 1958, p. 65.
```

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Sanford mine
 1
      Type: Gold
2
      Location: Lee County, near Saryord;
3
           The Sanford Gold Mining Company was developing a property in 1912.
      Reference: Pratt, 1914, p. 21.
7
8
      Saunders mine
         See Sanders mine, Cabarrus County
 2
13
      Saunders mine
         See Steel and Saunders mines, Montgomery County
 3
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1 Savannah (Betts Gap, New Savannah) mine Type: Copper 2 Location: Jackson County, about 7 miles southwest of Dillsboro, near Betts Gap, at the headwaters of Betts Creek, a branch of 5--Savannah Creek. The ores are massive sulfides, composed principally of pyrrhotite with lesser amounts of chalcopyrite, sphalerite, and pyrite in a country rock of hornblende gneiss. The primary ore is overlain by a gossan beneath which secondary chalcocite has been found in places. 10-Mica has been mined from pegmatite nearby. Secondary chalcorite was 11 mined before and during the Civil War. In 1895 or 1896 the property 12 was explored by 15 diamond drill holes, in 9 of which sulfides were 13 found. There are 3 shallow open cuts and 3 tunnels 25 to 40 feet 14 long. The mine was owned by W. S. Adams in 1911. 15-16 References: G. H. Espenshade, 1942, written communication; 17 Ross, 1935, p. 91-92; 18 Weed, 1911, p. 136. 19 20-21 22 24 25.

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Sawyer mine

Type: Gold

Location: Randolph County, 8 or 9 miles northwest of Asheboro, 5 miles west of Sophia. From Asheboro it is reached by Highway 90 and a good sand road. Carraway Creek runs through the property.

Five or 6 parallel "beds" or cleavage layers carrying gold occurred in a siliceous talcose slate or sericitic quartz schist which disintegrated to form a fine white sand. Overlying the ore-bearing beds was a porous black rock carrying pyrite, but no gold. The Miller vein is a more siliceous and enriched ore on the hanging wall side of a dark granitic porphyry dike. The Davis vein is separated from the main Miller vein by a 240-foot horse including the dike. The sulphur vein is parallel to the Miller and some 600 feet southeast. Other areas of the mine tract were known as the Brummel Hill and Old Pace workings. The ore was oxidized to a depth of about 80 feet. At that depth sulfides appeared, with pyrite in scattered grains and bunches.

At one time, probably before 1850, the mine was whoked "with success and profit". It was operated in 1906, when a 150-foot shaft with levels at 100 feet was put down on the Miller vein. Six smaller shafts open the various veins. Twenty-one samples taken from the Brummel Hill workings in 1936 contained from a trace to \$36.75 per ton of gold.

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1
                     Bryson, 1937, p. 21-24;
       References:
  2
                      Emmons, 1856, p. 133;
  3
                      Kerr and Hanna, 1888, p. 253;
                      Nitze and Hanna, 1896, p. 59-60;
   5--
                      Nitze and Wilkens, 1897, p. 47;
                      Pardee and Park, 1948, p. 64, 88;
  7
                      Pratt, 1907, p. 42-43.
  10-
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Scarlet mine 1 Type: Gold, copper 2 Location: Randolph County, on the northern outskirts of Ashboro, 2 miles north of Asheboro, on Highway 220 N., and about 2 miles past the intersection of Highways 64 and 22. 5-6 Chalcopyrite, sphalerite, chlorite, and amphibole enclosed in 7 silicified masses of bedded tuffs of the volcanic series, were seen on the dumps. The features are much like those of typical contactmetamorphic deposits. The mine was opened as a gold mine in 1882. 10-It was worked for copper between 1899 and 1918. In 1934 two shafts 11 about 125 feet apart and some old pits and a caved shaft were seen. 12 In 1906 and 1907 a production of nearly 8,000 lbs. of copper with a little gold and silver was reported. The Tenvanoca Copper Co. is said 14 to have produced considerable ore between 1913 and 1918. A diamond 15-drilling program was carried on in 1948 by the U.S. Bureau of Mines. 16 17 References: C. B. Brown, 1934, written communication; 18 Kline and Dosh, 1949, 19 Pardee and Park, 1948, p. 88; 20-Stuckey, 1965, p. 293. 22 23 24

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Scott Hill mine
 1
     Type: Gold
 2
     Location: Caldwell County, near Johns River 1 1/2 miles northwest of
          Hartland, on Seley's (Celia) Creek, adjoining the Miller mine.
  5--
          Quartz veins in schist near a diabase dike altered to serpentine carry
 6
     gold. Many cuts, tunnels, and shallow shafts were put in to explore
7
     the veins, but in 1896 the mine had not been reopened for some years.
     The small growth in the dumps and the state of preservation of the head
     frame when examined in 1966 suggest that work had been done since 1936.
 10-
11
     References: Bryant and Reed, 1966, p. 7;
12
                  Bryson, 1936, p. 139;
13
                  Nitze and Hanna, 1896, p. 176;
14
                  Nitze and Wilkins, 1897, p. 68;
 15-
                  Pardee and Park, p. 62.
16
      Scott's Creek prospect
 1
      Type: Copper
 2
      Location: Jackson County,
 3
           Copper ore was noted at this locality.
  5-
      Reference:
                 Bryson, 1930, p. 24.
 7
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Seaman prospect
1
      Type:
             Tin
2
      Location: Gaston County, about 1/3 mile south of the Jones mine.
           Cassiterite in muscovite schist or gneiss wall rock.
 5-
6
      Reference: Kesler, 1942, table 18.
7
     Seat prospect
     Type: Copper
2
     Location: Granville County, 3/4 mile south of the Holloway mine.
3
           A shaft, not more than 50 feet deep, was sunk in the 1800's
 5--
     where bornite was seen cutting massive porphyritic Virgilina Green-
6
     stone.
7
     Reference: G. H. Espenshade, 1942, written communication.
9
     Secrest (Sechrist) mine
 1
     Type: Gold
2
     Location: Davidson County, 1 1/2 miles northeast of the Silver Hill
3
          mine.
 5-
          A quarte vein carrying pyrite and galena but little gold in
6
                              is described.
     dense siliceous tuff One shaft was sunk, but little work was done.
     References: C. B. Brown, 1934, written communication;
                  Pardee and Park, 1948, p. 62;
 10-
                  Pogue, 1910, p. 108.
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Secrest mine
 1
      Type: Gold
2
      Location: Union County, 2 miles northeast of Indian Trail and 1/4
           mile northeast of the Smart mine.
 5-
           Gold and silver with galena and chalcopyrite occur in quartz
      veins in argillaceous to chloritic schists.
      References: Bryson, 1936, p. 95;
                   Nitze and Hanna, 1896, p. 100;
 10-
                   Pardee and Park, 1948, p. 65.
11
12
      Sedberry mine
1
      Type: Gold
2
      Location: Montgomery County, 1 mile south of Onvil.
3
4
                                  along
           Surface mining was done [on] the branch. Gold occurs in small
 5--
      quartz stringers in slate and tuff. The mine was discovered about
      1907. There were 2 shafts, 85 and 50 feet deep. Gold production
     was reported in 1923.
8
      References; C. B. Brown, 1934, written communication;
 10-
                   Drane and Stuckey, 1925, p. 29;
11
                   Pardee and Park, 1948, p. 64.
12
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U. S. GOVETNATION

Senter Mine 1 2 Type: Gold Randolph County, near Lytton, Tabernacle Township -Location: Here in 1903 two bands or veins of gold-bearing 5-schistose rock were opened for 4,000 feet along the strike and for a width of 100 to 300 feet by means of 7 open cuts, pits, and short drifts. A 70-foot shaft was also sunk. The ore was low grade, averaging \$3 to \$5 per ton. 10-11 Pratt, 1904, p. 13. Reference: 12 Sewell mine 1 Type: Gold Location: Moore County,  $4\frac{1}{2}$  miles southeast of Carter. 3 4 Reference: Pardee and Park, 1948, p. 64. 5-1 Shaffer mine Type: Gold Location: Mecklenburg County, 10-11 miles south of east of Charlotte, 3 south of the A.J. Wilson mine, and  $\frac{1}{2}$  mile southwest of Mungo's 5store. 7 This is one of a series of quartz veins trending northwestsoutheast. References: Nitze and Hanna, 1896, p. 144, 145; 10-

Pardee and Park, 1948, p. 63.

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Shell Ridge prospect
1
     Type: Copper
2
                                                          in the same
     Location: Jackson County,
          belt of prospects as the Wayehutta, Hornbuckle, and Buck Knob
          prospects.
     References: Smith, 1875, p. 113;
16
                  Weed, 1911, p. 137.
17
 10-
     Shemwell mine
     Type: Gold
     Location: Rutherford County,
          Arborescent gold was reported.
     Reference: Genth, 1891, p. 13.
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Shields mine 1 Type: Gold 2 Location: Moore County, 650 feet northwest of the Brown mine. The ore body was a mixture of schistose sericitized rock and 5fine granular clay carrying numerous quartz veins. The mine was operated in 1895 by Cash Shields. There was an open cut and a shaft of unknown depth. References: Bryson, 1936, p. 69; 10-Conley, 1962a, p. 25; 11 Kerr and Hanna, 1888, p. 244; 12 Nitze and Wilkens, 1897, p. 57; 13 Pardee and Park, 1948, p. 64. 14 Shiloh Church prospect 1 Type: Tin 2 Location: Cleveland County, about 1 mile east of Grover, near the South Carolina state line, in the west bank of the road. 5-Cassiterite occurs in greisen gangue in muscovite schist and gneiss and in hornblende gneiss. 7 Reference: Kesler, 1942, table 18. 24 25

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Shin, Jake, mine
1
      See Rocky River mine, Cabarrus County.
2
3
      Shin, Tom, mine
 1
      See Rocky River mine, Cabarrus County.
 2
3
8
     Shingle Hollow Road prospect
ì
2
     Type: Lead
     Location: Rutherford County, on the east side of Shingle Hollow
3
          Road, 0.8 miles northwest of the Welcome Home chruch, about 8
          miles northwest of Gilkey.
 5-
6
          A prospect pit containing galena, pyrite, chalcopyrite, and
7
8
     bornite was seen.
     Reference: Conley, 1958, p. 65.
 10-
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U. S. GOVERNA

Shuford mine 1 Type: Gold 2 Location: Catawba County, 6 3/4 miles southeast of Catawba station on 3 the Southern Railway. 5-The deposit is a zone about 300 feet wide and 1,000 to 2,000 feet 6 long in which schist and gneiss county rock is penetrated by variously 7 oriented seams of gold-bearing quartz. The quartz is usually honeycombed and broken into soft, angular fragments, and at the surface the country 9 rock is thoroughly decomposed and iron-stained saprolite. 10-The entire surface of the mine was "pay" material, and was worked 11 by placer methods. In 1906 the ore was mined by means of a pit 90 feet 12 deep and 250 to 300 feet across, and the excavated saprolite material was treated in an improved type of log washer. The Catawba Gold Mining 14 Company produced 1, 716 ounces of gold and 586 ounces of silver from 15--1902 through 1911. 16 17 References: Kerr and Hanna, 1888, p. 307; 18 Nitze and Hanna, 1896, p. 150; 19 Pardee and Park, 1948, p. 72; 20-Pratt, 1906, p. 21-22; 1908, p. 16-17. 21 22 23 24 25-

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A.D.,
    A.D. Shuford mine
1
     Type: Gold
2
    Location: Catawba County, 3/4 mile southeast of the Shuford mine.
3
4
          This was a placer mine very similar in character to the Shuford
 5-
    mine.
7
    References: Kerr and Hanna, 1888, p. 307;
8
9
                 Nitze and Hanna, 1896, p. 150.
 1
       Silmers Bald Prospects
 2
       Type:
                    Copper
       Location:
                    Swain County, on the crest of the Smokies, and on the
                    headwaters of Jonas Creek about 500 feet below the
  5-
                    crest. -
                         Small quartz veins and tiny stringers and
                    disseminations of galena and chalcopyrite were found
                    in sheared feldspathic sandstone. These two locations
 10-
                    were prospected around 1905, the upper prospect by a
11
                    shallow pit, and the lower one by a shallow opencut
12
                    and two tunnels.
13
       Reference:
                    Espenshade, 1963, p. 36.
14
24
       Silver mine
 1
       See Whitney group, Cabarus County. U. S. GOVERNOON
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### Silver Hill (Washington, King's) mine

Type: Gold, silver, lead, zinc.

Location: Davidson County, 7 1/2 to 10 miles southeast of Lexington, and 4 1/2 miles northeast of Fairmont, near the source of Buddle Branch.

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25-

The ores are a complex mixture of galena, sphalerite, pyrite, and chalcopyrite, carrying silver and gold, in highly altered country rock with little or no quartz gangue. Minor minerals in the deposit are anglesite, angentite, calamine, cerussite, chalcanthite, chalcocite, cuprite, goslarite, linarite, tenorite, pyromorphite, native silver, and stolzite, and the gangue minerals actinolite, orthoclase, wavellite, and zoisite. The country rock is chloritic and sergicitic schist striking N.  $35^{6}$  E. and dipping  $57^{\circ}$  NW. Nerby is an eruptive dike consisting of pyroxene and silicified rock. The ore zone contains two main lodes, the "east" and "west" veins, which join and separate. The average composition of the sulfide ore was 21.9% galena, 17.1% pyrite, 59.2% sphalerite, 1.8% chalcopyrite. Galena appeared in the ore at a depth of 60 feet; at a depth of 200 feet sphalerite was more abundant than galena. The mine was opened in 1838, and was worked actively for 30 years, first as the King's mine, then as the Washington silver mine, and finally as the Silver Hill mine. Only gold and silver were saved from the upper oxidized zone; when unoxidized ores were reached, lead was also recovered, and was used by the Confederate army during the Civil War. After 1882 the

# Silver Hill (Washington, King's)mine (con't)

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mine was idle, except for a short period from 1898 to 1900.
1
      total production has been estimated at $1,000,000 in silver, lead,
2
      and zinc. The mine was responed briefly in 1938. In 1942 the New
3
      Jersey Zinc Company conducted a program of diamond drilling and soil
      sampline at the mine. An average of 200 assays of the ore gave 21.9%
 5-
      galena, 17.1 percent pyrite, 59.2 percent sphalerite, 0.025 percent
      silver and lead, and 1.8 percent chalcopyrite. Large dumps containing
7
      fine-grained lead-zinc ore were observed at the mine in 1958.
9
                   Broadhurst, 1955, p. 20-21;
      References:
 10-
                   Emmons, 1956, p. 183-195;
11
                   Kerr and Hanna, 1880, p. 193-194;
12
                   Kinkel, A. R., Jr. 1958, written communication;
13
                   Murdock, 1950, p. 13;
14
                   Nitze and Hanna, 1896, p. 61;
 15-
                   Pardee and Park, 1948, p. 72-72;
16
                   Pogue, 1910, p. 98;
17
                   Stuckey, 1965, p. 321-322.
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### Silver Nugget mine

Type: Copper

Location: Granville County, 500 yards south of the Big America mine and 200 yards south of the Tuck mine.

A pit 10 feet deer disclosed copper ore carrying a larger proportion of silver than most of the ores of the area.

Reference: Kerr and Hanna, 1888, p. 216.

#### Silver Valley mine

See Førr, Allen, mine, Cabarrus County

## Silver Valley (Spring Valley) mine

Type: Gold, silver, lead, zinc

Location: Davidson County, 5 miles northeast of Silver Hill; 12 miles east-southeast of Lexington.

The ore resembles that at the Silver Hill mine and is a complex mixture of galena, sphalerite, chalcopyrite, and pyrite carrying gold and silver in a complex area of acid volcanic-sericite schist country rocks. The sphalerite content of the ore increases with depth. The mine was discovered in 1880 and was worked until 1893.

References: Kerr and Hanna, 1888, p. 197-199;

Nitze and Hanna, 1896, p. 66;

Pardee and Park, 1948, p. 66;

Pogue, 1910, p. 104;

Stuckey, 1965, n 322-323.

Type: Gold Location: Mecklenburg County, 10 miles southeast of Charlotte in Clear Creek township, 5-Several veins have yielded quartzose ores with some sulfides, 6 7 including chalcopyrite. References: Kerr and Hanna, 1887, p. 302; Nitze and Hanna, 1896, p. 144; 10-11 Pardee and Park, 1948, p. 63. 1 Skeenah Creek prospect 2 Type: Copper Location: Macon County. A sample of ore analyzed for TVA contained 1.32 percent copper 5-and 5.8 percent iron. Reference: Tennessee Valley Authority, 1943, p. 32. 7 19 Slack Mine 1 Type: Gold Location: Randolph County,  $2\frac{1}{2}$  miles south of Asheboro, near the Winningham mine. 5-References: Kerr and Hanna, 1888, p. 253; Nitze and Hanna, 1896, p. 59; Wiore and Wilkens, 1897, p. 47; Pardee and Park, 1948, p. 64.

1

Simpson mine

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Sloan mine
1
      Type: Copper
2
     Location: Chatham County, in the forks of Deep and Rocky Rivers,
3
           one mile from each.
 5-
           A 2-foot vein of chalcopyrite was worked to a depth of 40 feet
      in the 1800's.
7
8
      Reference: Kerr and Hanna, 1888, p. 212.
9
     Sloan mine
1
     Type: Gold
2
     Location: Gaston County.
     Reference: Genth and Kerr, 1881, p. 103.
 5--
15-
     Sloan mine
1
     Type: Gold
2
     Location: Mecklenburg County, adjoining the Green C. Cathey mine,
           8 miles northwest of Charlotte.
 5-
           Gold, pyrite, and chalcopyrite ore has been noted at this mine,
6
     which was worked to a depth of 40 feet in the 1880's.
7
     References: Genth and Kerr, 1881, p. 111;
                  Nitze and Hanna, 1896, p. 139;
 10-
                   Pardee and Park, 1948, p. 63.
11
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Smart (Bonnie Doon) and Fulwood mines
1
     Type: Gold, lead
2
     Location: Union County, 1 mile N. 30°E. of the Black mine.
           and Fulwood mines are located on the same 370 acre tract.
 5-
           Galena and pyrite with gold, silver, sphalerite, and chalcopyrite
     occur in a quartz vein in silicified sercite schist country rock.
     The Smart mine has been worked intermittently from 1835 to 1911. The
      "Lead shaft" was sunk in 1888 to a depth of 110 feet. Ore from this
     shaft assayed 0.69 ounce of gold and 0.23 ounce of silver perton.
 10-
     of which was 200 feet deep.) In all there were 6 shafts, Pits extered
11
     for a length of nearly 2,000 feet. The mine was renamed the Bonnie
12
     Doon in 1906 and was reopened for a short time by J. C. Bates, who
     did some development work. The latest reports of production were in
14
     1910 and 1911.
 15-
16
     References: Bryson, 1936, p. 94;
17
                   Genth and Kerr, 1881, p. 119;
18
                   Kerr and Hanna, 1888, p. 189;
19
                   Nitze and Hanna, 1896, p. 99-100;
 20-
                   Pardee and Park, 1948, p. 104;
21
                 Pratt, 1907, p. 61-62;
22
                   Shepard, 1853, p. 594.
23
24
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```
1
      Smith mine
2
           See Welborn mine, Davidson County.
3
      Smith mine
1
      Type: Gold
      Location: Gaston County, 13 miles west of Charlotte and 3 miles
           south of Mount Holly.
 5-
      References: Kerr and Hanna, 1888, p. 304;
                   Pardee and Park, 1948, p. 62.
7
11
       Smith mine
      Type: Gold
 2
      Location: Polk County, South Mountain area, \frac{1}{2} mile east of the
 4 .
            Double Branch mine.
  5-
            Rich, narrow quartz veins carried gold.
 6
 7
      References: Bryson, 1936, p. 143;
                    Nitze and Hanna, 1896, p. 174.
21 '^
      Smith mine
       Goliham mine, Randolph County.
 2
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Smith placer
    Type: Gold
    Location: Cabarrus County, 2 miles northeast of Georgeville.
                                                           were
         Quartz veins cutting slate of the volcanic series was seen.
 5-
    gold was found in a dry stream. Placers in the bed of a small draw were
    worked intermittently from 1905 to 1935.
    References: C. B. Brown, 1934, written communication;
                Pardee and Park, 1948, p. 71.
 10-
      Smith and Palmer mine
1
      Type: Gold
      Location: Mecklenburg County, the southwest extension of the Rudisil
3
           mine, 1 mile south of Charlotte.
 5
           A line of pits extended for 500 feet along the strike of the
      Rudisil vein in 1896. The greatest depth of workings was 75 feet,
7
      and the width of the vein from 2 to 4 feet.
      References: Nitze and Hanna, 1896, p. 131;
 10-
                   Nitze and Wilkens, 1897, p. 64;
11
                   Pardee and Park, 1948, p. 63.
12
23
     Smith, V. W., mine
     See Burrell Wells mine, Gaston County.
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U. S. GOVERNMENT ...

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Snider mine 1 Type: Gold 2 Location: Rowan County, 3 Gold and pyrite were reported, 5-6 Reference: Genth and Kerr, 1881, p. 116% Snipe's mine Type: Gold Location: Chatham County. 3 Magnetite, epidote, chrysocolla, and azurite were reported in the ore. . 6 7 Reference: Genth and Kerr, 1881, p. 99. я 15-Snyder mine Type: Gold 2 , Location: Cabarrus County, 8 miles southwest of Mount Pleasant, on the same tract as the Faggart mine. 5-A quartz vein with white and rose rhod chrosite in bedded 6 argillite and volcanic slate carried gold values of from .35 to 14 ounce per ton at the surface. 48 A 137-foot shaft was sunk by E.L. Hertzog of Spartanburg, S.C., 9 in 1935. The values decreased with depth. In 1936 a 10-stamp mill 10 was erected by A.L. Nash of Salisburg to treat ore on the dump.

References: Bryson, 1936, p. 86; 1937, p. 17.

Southern Belle Mine 1 2 Gold Type: Rowan County,  $6\frac{1}{2}$  miles southwest of Salisbury, Location: 1 3/4 miles east of the Southern Railroad, 5-The mine was worked in about 1905. In 1935 there were a series of trenches, pits, and shafts distributed for 350 feet along a quartz vein 10-25 feet thick, which contains pockets and streaks of limonite. 10-Nitze and Hanna, 1896, p. 117; References: 11 Pardee and Park, 1948, p. 92. 12 13 Southern Copper and Gold Mining Co. mine Type: Gold Rowan County, a few hundred yards southwest of the Randolph shaft, in the Gold Hill district. 5 --Ores occur in fine silicified tuff or rhyolite and in coarse-grained tuff. The ore minerals in the coarse tuff are chalcopyrite, sphalerite, galena, and auriferous pyrite. In the fine tuff the ore minerals are sphalerite, galena, and pyrite, with less chalcopyrite and quartz. 10-Reference: Laney, 1910, p. 110.

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#### Southern Homestake mine

Type: Gold

Location: Randolph County, 3½ miles northwest of Jackson Creek, and

13 miles south of Thomasville; in the Lytton mining district,

near Lytton, Tabernacle Township.

Free milling gold ore occurs in parallel bands or veins in a schistose zone in porphyritic rhyolite flow breccis. In 1904-1906 there were a 52-foot shaft, several trenches, a tunnel, and open cuts extending for a distance of 12,000 feet along the strike. A cyanide mill installed at that time treated 150 tons of ore and then was abandoned. The last work recorded was in 1923. This was low grade ore, averaging from \$3 to \$5 per ton.

References: C. B. Brown, 1934, written communication;

Pardee and Park, 1948, p. 64;

Pratt, 1907, p. 33, 464
(Pratt, 1904, p. 12-13;

## South Muddy Creek placers

Type: Gold

Location: McDowell County, along South Muddy Creek and its tributaries, Long Branch, Alexander Branch, Gum Branch, and High Shoal Branch.

Placer deposits.

Reference: Nitzeand Hanna, 1896, p. 152 (map).

```
Spanish Oak Gap mine
1
     Type: Gold
2
     Location: Montgomery County, on the west flank of the Uharie
3
          Mountains.
 5-
          This was a placer mine in gravel underlying saprolite. Mining
     was hindered by the scarcity of water and by the tenacious nature of
7
     the clayey saprolite.
9
     References: Bryson, 1936, p. 78;
 10-
                  Kerr and Hanna, 1888, p. 248;
11
                  Nitze and Hanna, 1896, p. 80;
12
                  Nitze and Wilkens, 1897, p. 52;
13
                  Pardee and Park, 1948, p. 64.
14
 15-
    Spears mine
    Type: Gold
    Location: Cabarrus County, 1 mile northwest of Pioneer Mills.
 3
          In 1890 the mine was worked by John Eudy. In 1931 J. A. Terry
  5-
     sank a shaft between two old pits on a 3 inch quartz vein.
 7
    Reference: C. B. Brown, 1934, written communication.
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Spencer (Copple, Ruth) mine 1 Type: Gold, copper 2 . Location: Randolph County, 6 miles north of Jackson Creek; on the 3 upper branches of the Carraway, near the southern boundary of Guilford County. 5-6 A nearly vertical quartz vein from 4 to 6 feet wide carrying disseminated chalcopyrite is described by Emmons. Calcite and bornite are also noted in the ore. The country rock is described as greenstone schist or gabbro. The mine was worked before the Civil 10-War, when an 80-foot shaft was sunk, and again in the late 1800's and 11 early 1900's. 12 13 References: C. B. Brown, 1934, written communication; 14 Emmons, 1856, p. 206; 15-Kerr and Hanna, 1888, p. 212; 16 Pardee and Park, 1948, p. 64. 17 Splawn mine 2 Type: Gold Location: Polk County, South Mountain area. This was a massive vein of low-grade gold-bearing quartz. References: Bryson, 1936, p. 143; Nitzeand Hanna, 1896, p. 174.

Spoon mine 1 See Pee Dee mine, Randolph County -2 Spring Creek mine 1 Tupe: Barite 2 Location: Madison County, 0.8 mile northeast of Bluff. 3 Barite occurs in large crystals and crystalline mages in veins 5which trend in a northeast-southwest direction. References: Conley, 1958, p. 49; Keith, 1904, p. 9. 1 Spring Valley mine See Silver Valley mine, Davidson County. Sprouse mine Type: Gold Location: McDowell County, near Demming on South Muddy Creek. Gold-bearing quartz veins containing galena and sphalerite were 5mined. Placer and lode deposits were worked intermittently during the period 1885-1935 by Capt. J. J. Sprouse. At least 12,700 dwt. 7 of gold was recovered from stream gravels. A 125-foot shaft was sunk on one quartz vein. Placer mining was stopped by an act of legislature prohibiting tailwigs from being discharged into South Muddy Creek. 10-11 References: J. T. Pardee, 1934, written communication;

Pardee and Park, 1948, p. 77.

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Stackhouse Mines (including Sandy Bottom, Nettie, Martha, Defender) 2 Barite Type: Madison County, south of Walnut Gap, 2.8 miles on the Location: Sandy Bottom road from its junction with U. S. 70 5and 25 at Walnut Gap. 6 The ore is barite associated with fluorite, pyrite, calcite, quartz, and traces of copper in veins along or near thrust faults in Max Patch Granite of Archean age. The vein has an agerage dip of 550 to the 10east and is enclosed by a hanging wall of slate and a 11 The Bureau of Mines drilled 4 footwall of granite. 12 holes at the Sandy Bottom property, on a tract of 600 13 acres, in 1944, but sludge samples showed no more than 14 a trace of barite. Hunter and Gildersleeve believed 15that reserves of barite ore existed at depth below the 16 old workings and near the northern end of the vein 17 where there were unmined portions. 18 19 References: Dahners, 1949, p. 6; 20-Hunter and Gildersleeve, 1946, p. 9-10. 21 22 23 24 25

Stafford Mine 1 2 Type: Gold 3 Randolph County, in the southwestern corner of the Location: County, and several hundred feet southwest of the 5-Griffin Mine, on a hill. Pyrite, pyrrhotite, and free gold were found in a shear zone in silicified tuff. In 1934 the workings consisted of a shaft with a stope and a short 10adit. 11 C. B. Brown, 1934, written communication; References: 12 Pardee and Park, 1948, p. 64. 13 Stallings mine Type: Gold Location: Cabarrus County, near Georgeville, the western extension of the Phoenix vein. 5-In the 1930's Furr and Smith sank 3 shafts on a quartz and slate vein about 20 inches wide. At the surface the ore was decomposed; at depth 7 sulfides were found. 10- Reference: Bryson, 1937, p. 17.

Standard Mine

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1

Type:

Gold

Location:

Rowan County, southwest of the Hunnicut and north of

the Union Copper Mine, —

Several narrow belts of mineralized schist along the Gold Hill fault were described. Gossan covered the surface in 1856, will iceous veins carrying copper carbonates and black oxide were exposed in an open cut known as the "big cut". in 1856.

10-

References:

Emmons, 1856, p. 206-207;

Nitze and Hanna, 1896, p. 88.

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Star (Union Refining and Mining Company) mine

Тур

Type: Gold

Location: Montgomery County, 4 miles southwest of Star. -

length in rocks of the volcanic series. The Union Refining and

1954 and 1955 under the direction of H. A. Knight, Sr.. \$20,000

Mining Company of High Point, N.C., did open cut work at the mine in

of gold was recovered at the old Candor or Howie mine cyanide plant

before the mine closed. In 1958 and 1959 diamond drilling revealed

a large orebody; a shaft was started and a new 100-ton cyanide plant

Gold occurs in an orebody 100 feet wide and of unknown depth and

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Reference: Stuckey and Conrad, 1961, p. 6-7.

was being built at the Candor mine.

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1
      Stearnes mine
2
      Type: Gold
      Location: Mecklenburg County.
 5~
           Gold and pyrite were noted in the ore.
7
      Reference: Genth and Kerr, 1881, p. 111.
8
1
    Stearns mine
    See Putnam mine, Union County.
3
12
     Sted mine
     Type: Gold
2
     Location: Montgomery Country.
3
     Reference: Pardee and Park, 1948, p. 64.
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# Steel and Saunders Mines

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Type:

Location:

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Gold, silver

Montgomery County, on the east side of the Uharrie River,  $1\frac{1}{2}$  to 2 miles southeast of Eldorado  $\longrightarrow$ 

The country rock is similar to that at the Russell Mine - quartzitic, chloritic, argillaceous, and talcose schists derived from tuffs. The ores occurred in mineralized zones varying from 9 to 20 feet in thick-Narrow parallel seams of much richer ore were found running through the mass of mineralized rock. There is much free gold associated with galena, sphalerite, chalcopyrite, and pyrite. Gold was discovered at this mine about 1832 and the mine was worked extensively before 1853. In 1876 the mine was purchased by the Genesee Gold Mining Company, mined and treated the ore in Chileay Mills for some years. A 40-stamp mill was in operation in 1887. At that time the workings were 220 feet deep. There is no record of much activity since 1888. The ruins of the mill were seen in 1934. The production for 1887 was \$150,000.

References: Bryson, 1936, p. 74-75;

Kerr and Hanna, 1888, p. 199-201; 248; 252;
Nitze and Hanna, 1896, p. 77-78;
Nitze and Wilkens, 1897, p. 53;

Pardee and Park, 1948, p. 83-84.

```
Steele mine
 1
      Type: Gold
2
      Location: Rowan County.
3
      Reference: Pardee and Park, 1948, p. 64.
 5-
6
      Stewart (Stuart) mine
1
      Type: Gold
      Location: Mecklenburg County, 4\frac{1}{2} miles northwest of Charlotte.
3
           An ore dump in altered and mineralized slate was seen in 1934.
      References: J.T. Pardee, 1934, written communication;
7
                   Pardee and Park, 1948, p. 63.
 15-
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Stewart mine

2 Type: Gold

Location: Union County,  $5\frac{1}{2}$  miles northeast of Indian Trail, about  $1\frac{1}{2}$  to 2 miles southwest of the Moore mine, and  $\frac{1}{2}$  mile north of Goose Creek.

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Three veins in argillaceous and sericitic schists contained disseminated pyrite and galena with stringers of gold-bearing quartz. Sphalerite, arsenopyrite, and pyromorphite were also noted in the ore. Some of the ore was rich in lead content. In 1894 the mine had two shafts 80 and 185 feet deep, connecting with drifts and stopes. The veins were named the Asbury, Miller, and Jake, from southeast to northwest. The mine was last worked in the 1890's, when a 10-stamp mill was in operation, and a production of \$85,000 in gold was reported from one ore shoot. In 1934 ore from the dumps contained iron oxide and assayed 0.8 ounce of gold and 0.24 ounce of silver per ton.

References: Brown, C. B., 1934, written communication;

Bryson, 1936, p. 92-93;

Genth and Kerr, 1881, p. 119;

Kerr and Hanna, 1888, p. 190; 264;

Nitze and Hanna, 1896, p. 96-97;

Nitze and Wilkens, 1897, p. 63;

Pardee and Park, 1948, p. 104

Stinson mine 1 Type: Gold 2 Iocation: Mecklenburg County, near the Cabarrus County line, and 3 Pioneer Mills. 5-Gold and pyrite were found here. This is one of the Pioneer Mills group of mines and it is similar to that mine. 7 References: Genth and Kerr, 1881, p. 111; 9 Kerr and Hanna, 1888, p. 302; 10-Nitze and Hanna, 1896, p. 144; 11 Pardee and Park, 1948, p. 63. 12 13 Strothers (Ruben Boswell) prospect Type: Gold Location: Union County, 2 miles northeast of Weddington. 3 Gold occurs in a vein 9 feet wide in biotite granite about 1 mile west of its contact with schists. Very fine gold is also found along the stream in soil and alluvium to a depth of 16 feet. Below the 7 alluvium is blue sandy clay. An 18-foot timbered shaft on the creek, pits, and an old Chilean mill were seen in 1934. 10-References: C. B. Brown, 1934, written communication; 11 Pardee and Park, 1948, p. 104. 12

U. S. GOVERNING

Stroup prospect 1 2 -- see Jenkins Farm prospect, Gaston County. 3 Sturgess mine 1 See Portis mine, Franklin County 2 6 Sugarloaf Mountain prospect 1 Type: Copper 2 Location: Jackson County, near the crest of Sugarloaf Mountain, at the head of Wayehutta Creek. Massive sulfide ore containing pyrrhotite and minor chalcopyrite 6 in quartz - biotite gneiss country rock. A 4 to 5 foot thick gossan 7 covers the primary ore. About 125 feet south in another gossan zone with disseminated pyrite cutting gnarled and contorted garnet - mica schist. A shallow shaft and a 50-foot tunnel have been dug to expose 10the gossan. 11 12 Reference: G. H. Espenshade, 1944, written communication. Sugartown River placer 1 2 Type: Gold Location: Macon County. Gold placers. 5-Reference: Pardee and Park, 1948, p. 63.

Sulfur mine

See Orchard mine, Cabarrus County.

Trunk

Summers farm prospect

Type: Tin

Location: Cleveland County, 1/4 mile north of Mauney Park prospect,

near the Gaston County line.

Cassiterite-bearing greisen float was found in a cultivated

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Cassiterite-bearing greisen float was found in a cultivated field. Boulders and rock have been plowed up, but no prospect work has been done.

References: Keith and Sterrett, 1917, p. 143; Kesler, 1942, table 18.

#### Summerville mine

Type: Gold

Location: Mecklenburg County, 6 miles west of Charlotte.

A quartz vein 8 feet wide and several hundred feet long on the surface and carrying solid sulfides is in granite country rock. In 1906 Mr. C.A. Ames sank a 50-foot shaft and a drift was driven to an older 50-foot shaft 85 feet away. At this point the funds gave out and the work was discontinued. The sulfides assayed \$64 per ton.

References: Pratt, 1907, p. 66;

Pardee and Park, 1948, p. 63.

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Summer (Carson, McClure) mine
1
      Type: Gold
2
      Location: Mecklenburg County, 6 miles northwest of Charlotte, south
3
           of the Cathey mine.
 5-
           A gold-bearing cellular quartz vein in granite trends N. 30° W.
      Its northern extension forms a mine called the Carson or McClure.
7
      One-quarter mile farther north the vein is opened on the land of
      Mr. Cathey.
      Reference: Mining Magazine, 1853, v. 1, no. 6, p. 591.
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## Surface Hill (Harris) mine

Type: Gold

Location: Mecklenburg County, ll miles south of east of Charlotte,
300 yards south of the Ellington mine, and located on a high
plateau in Clear Creek township, from which flow McAlpine's
Creek to the southwest, Reedy Creek to the northeast, and Clear
Creek to the southeast.

Two large quartz veins, the Harris, striking N. 45°Es and the Lidner or Vivian, striking N. 10°W, intersect. The veins are in granite country rock and carry brown ore, chalcopyrite, and a large pocket of gold nuggets near the junction of the two veins where a dike has cut across them. A number of reticulated quartz veinlets have scattered their contents widely over the 66 acres comprising the mining tract.

The mine is famous for its gold nuggets, and several thousand pennyweights must have come from the space of a few square feet.

References: Bryson, 1936, p. 125-126;

Kerr and Hanna, 1888, p. 303;

Nitze and Hanna, 1896, p. 145;

Pardee and Park, 1948, p. 63.

U. S. GOVERNOLTON TOTAL

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Swamp Shaft No. 1
1
    Type: Tin
    Location: Lincoln County, part of the Ka-Mi-Tin mine.
3
         Cassiterite occurs in pegmatite or greisen in an ore body 72
 5--
    inches thick and 30 feet long.
6
    Reference: Kes#ler, 1942, table 18.
                (Swift Island)
      Swift Creek mine
1
      Type: Gold.
2
     Location: Montgomery County, in the southwestern part of the County,
3
      near the Sam Christian mine, and about 3 miles from Swift Island
     Ford on the Yadkin River.
 5-
6
          Genth reports gold in plates, covered with octahedral crystals
7
     at the Swift Island mine which may be the same mine.
9
     References: Genth, 1891, p. 13;
 10-
                   Kerr and Hanna, 1888, p. 247;
11
                   Pardee and Park, 1948, p. 64.
13
     Symonds mine
     Type: Gold
2
     Location: Davidson County, near Silver Hill.
3
     Reference: Nitze and Hanna, 1896, p. 68.
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Taggart mine
1
     Type: Gold
2
     Location: Cabarrus County, 3\frac{1}{2} miles north of Rocky River.,
3
           In 1934 little was seen except dumps overgrown with vegetation.
 5-
     The workings of the surface are aligned on a course of about N. 55° W.
7
     Reference: Pardee and Park, 1948, p. 71.
8
9
      Talbert mine
1
            See Hill mine, Randolph County
2
12
     Talc mine
1
            See Cagle mine, Moore County
2
 15-
       Tatham (Tasthour) Creek placers
 1
       Type: Gold
 2
       Location: Cherokee County, near Andrews.
 3
            Gold nuggets were produced by sluicing in 1911.
  5-
       References: Pardee and Park, 1948, p. 62;
                     Pratt, 1914, p. 19;
                     U.S.G.S. Mineral Resources 1911, pt. 1, p. 883.
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Taylor mine
1
     Type: Gold
2
     Location: Halifax County, near the Portis mine,
3
     References: Bryson, 1936, p. 63;
 5-
                   Kerr and Hanna, 1888, p. 241;
6
                   Nitze and Hanna, 1896, p. 27;
7
                   Nitze and Wilkens, 1897, p. 43.
      Taylor mine
1
      Type: Gold
2
      Location: Mecklenburg County, 3 miles southwest of Charlotte.
3
           Gold and pyrite were noted. The mine had been worked for a
      distance of 400 feet along the vein in 1887.
6
7
      References: Genth and Kerr, 1881, p. 111;
8
                   Kerr and Hanna, 1888, p. 293;
9
                   Nitze and Hanna, 1896, p. 131.
 10-
 1
      Taylor prospect
 2
      see McGuire prospect, Macon County
21
       Teeter, Zeb, mine
 1
 2
       See Champion mine, Mecklenburg County/
      Teeter, Z. V., mine
       See Black mine, Mecklenburg County. _
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Teisson mine
1
           See Ritter mine, Moore County.
2
    Thomas mine
1
     Type: Gold
2
    Location: Halifax County, 12 miles northeast of Ransom's Bridge
    References: Bryson, 1936, p. 63;
 5-
                  Kerr and Hanna, 1888, p. 24,
6
                  Nitze and Hanna, 1896, p. 27;
                  Nitze and Wilkens, 1897, p. 43.
    Thomas mine
    Type: Copper
2
   Location: Person County, 3 1/2 miles southwest of Virginia and 1/2
        mile southwest of the Holloway mine.
 5-
         White quartz veins containing numerous inclusions of fragments of
6
   porphyritic andesite country rock. From a study of material on the
7
    dump Laney concluded that the vein was not strongly mineralized and that
    very little ore was produced. The mine was opened in the 1880's by
 10- Harris and Hyde. It was later sold to Whitney and Stevenson, a
    Pittsburgh firm. It is stated that a few tons of ore were produced
11
    and shipped.
13
    References: Laney, 1917, p. 142-143;
                 Weed, 1900, p. 463, 464;
 15-
                 Weed, 1911, p. 83.
```

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Thomas mine, prospect south of,
1
     Type: Copper
2
     Location: Person County, 1 mile south of the Thomas mine.
3
            Native copper and cuprite occur in amyg ules in Virgilina
 5--
     Greenstone. A prospect pit here did not develop a promising ore pody.
6
7
      Reference: Laney, 1917, p. 156.
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### Thompson mine

Type: Gold

Location: Stanly County, 5 miles east of Albemarle, and 1 mile from the Crawford (Ingram) mine.

5--The deposit is in dense slaty rock derived from a find-grained siliceous tuff of the volcanic series, associated with a massive tuff 7 of more basic composition. The ore lode is composed of irregular and indefinitely bounded masses of slaty rock that contain disseminated pyrite and pyrrhotite, or their oxidation products, and gold. 10-1906 the mine was owned by Dr. V. A. Whitley, who optioned it out to 11 an operator. At that time the workings comprised an open cut 30 12 to 40 feet wide, 100 feet long, and 25 feet deep, and some smaller . 13 The ore was treated in a 10-stamp mill, but work was 14 stopped because of the difficulty of separating the gold from the clay. 15--In 1931 Mr. Ed Snuggs of Albemarle erected a new 10-stamp mill. After 16 his death the mine was operated by Mr. C. W. Wheelock, who reported a 17 production of 163 ounces of gold during the next two years. 18 fourteen diamond drill holes were put down to test the ore, which 19 assayed from 0.01 to 0.03 ounce of gold per ton.

References: Bryson, 1936, p. 25-26, 65;

Bryson, 1937, p. 19-20

Pardee and Park, 1948, p. 95-97;

Pratt, 1907, p. 58-59.

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Tingen mine
 1
     See Duke mine, Person County.
2
      Todd mine
 1
      Type: Gold
 2
      Location: Mecklenburg County, 5 miles northwest of Charlotte,
           1 mile southwest of the Frazer mine.
 5-
           Two or three quartz veins carrying sulfides were noted. The
6
      ores were oxidized near the surface. An 80-foot shaft with drifts
7
     had been put down before 1887. In 1886 a 10-stamp mill was erected.
     References: Kerr and Hanna, 1888, p. 293;
 10-
                   Nitze and Hanna, 1896, p. 133;
11
                   Pardee and Park, 1948, p. 63.
12
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U. S. GOVERNMENT IT

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Tom's Creek (Tone's Creek) mine
1
     Type: Gold
2
     Location: Montgomery County, on the west flank of the Uharie
          Mountains.
 5 -
          This was a placer mine in gravel underlying saprolite. Mining
6
     was hindered by the scarcity of water and by the tenacious nature of
     the clayey saprolite.
                 Bryson, 1936, p. 78;
     References:
 10-
                  Kerr and Hanna, 1888, p. 248;
11
                  Nitze and Hanna, 1896, p. 80;
12
                  Nitze and Wilkens, 1897, p. 52;
13
                  Pardee and Park, 1948, p. 64.
14
 15-
      Townsend mine
 1
      Type: Copper, gold
      Location: Rowan County, near the Barnhardt mine.
, з
           The ore was chalcopyrite and pyrite with gold.
  5 -
      Reference: Emmons, 1856, p. 207.
22
     Trap Hill mine
     --see Bryan's Gap, Wilkes County(
```

Trautman (Troutman) mine 1 Type: Gold, zinc, lead 2 Location: Cabarrus County, 2 miles south of Gold Hill, at the 3 southeastern edge of the Gold Hill group of mines. 5-Gold and sulfides occurred in lodes in silicified chlorite-6 sericite schist of the volcanic series. The character of the ore changed 7 from auriferous cellular quartz containing decomposed sulfides for the first 20 feet, to ferruginous quartz carrying crystallized pyromorphite, 9 cerfusite, and other lead minerals from 20 to 60 feet in depth; to 10auriferous pyrite and quartz from 60 to 100 feet in depth; to unaltered 11 quartz carrying increasing amounts of sphalerite and pyrite below 100 12 feet in depth. The Troutman vein was said to carry much argentiferous 13 This mine was the site of the first gold discovery in the galena. 14 Gold Hill region in 1842. In 1856 the vein was said to have yielded 15-\$400,000. 16 17 References: Kerr and Hanna, 1888, p. 193, 267-268; 18 Nitze and Hanna, 1896, p. 88-89; 19 Nitze and Wilkens, 1897, p. 58; 20-Pardee and Park, 1948, p. 89. 21 Trautman (Troutman) mine 1 Mecklenburg County, 5 to 10 miles west to northwest of

Nitze and Hanna, 1896, p. 132;

Pardee and Park, 1948, p. 63.

Charlotte

References:

5 --

Tredinick mine 1 Type: Gold 2 Location: Mecklenburg County, 7 miles southeast of Charlotte, near 3 Sardis Church. 5-A vein one to two feet wide carries "a relatively large amount 6 of copper minerals". The mine had been prospected to a depth of 80 7 feet and for a length of 200 to 300 feet by the 1880's. 8 9 Kerr and Hanna, 1889, p# 301; References: 10-Nitze and Hanna, 1896, p. 143; 11 Pardee and Park, 1948, p. 63. 12 Trotter mine 1 Type: Gold 2 Location: Mecklenburg County, west of the Charlotte city limits at 3 Remount Ave., at a bridge crossing the Southern Railway. 5-A quartz vein carrying gold, pyrite, and chalcopyrite in a granite shear zone shows in a cut just east of the bridge. In 1887 7 the mine had been prospected for a length of 450 feet, and worked to a depth of 70 feet. 10-11 References: Genth and Kerr, 1881, p. 111; Kerr and Hanna, 1888, p. 293; 12 J. V. Lewis, 1934, written communication; 13 Nitze and Hanna, 1896, p. 131-132; 14 Pardee and Park, 1948, p. 63. 15-

Troy Mine Type: Gold Montgomery County, 6 or 7 miles north of Troy Location: The ore is a band of decomposed slate, either 5sand or plastic clay, carrying limonite cubes and gold. On the northwest side is a vein of hard white quartz. Two other quartz veins were explored on the property. At a depth of 70 feet light-colored, sericitic schist carrying pyrite was encountered. 10-There is no visible difference between the ore-bearing 11 zone and decomposed country rock on either side. 12 Coarse and nuggety gold was panned from a small stream 13 on the property. The mine was operated in the 1880's and was 14 opened by a shaft known as the Moore shaft, and several 15other shafts. In 1906 the Troy Mining Company was 16 mining ore from 2 open pits, one 500 feet long and 17 20 to 24 feet wide, and hauling it about  $\frac{1}{4}$  mile to the 18 mill. A 50-ton cyanide plant was being installed at that 19 time. 20-21 Pardee and Park, 1948, p. 64; References: 22 Pratt, 1907, p. 24-25, 55-57. 23 24

### Troy prospect

Type: Lead, zinc

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Location: Montgomery County, north of Troy.

A quartz vein 10- to 12 feet wide at the surface was mineralized for its entire width. Ore on the dumps carried a trace of gold, 1 ounce of silver per ton, 10 to 20 percent lead, 19 to 22 percent zinc, and 1.1 percent copper. In the 1930's two shallow shafts were sunk to a depth of 20 to 30 feet by McGrew and Gibbons of Philadelphia.

Reference: Bryson, 1937, p. 37-38.

#### Tuck mine

Type: Copper

Location: Granville County, 300 yards southeast of the Big America mine.

In 1888 a promising vein of good width had been discovered at a depth of 15 feet.

Reference: Kerr and Hanna, 1888, p. 214, 216.

### Tuck mine

See Yadkin mine, Rowan County.

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Tuckase gee mine
1
2
      Type: Copper
      Location: Jackson County.
 5-
      Reference: Weed, 1911, p. 137.
      Tucker (California) mine
1
      Type: Gold
2
      Location: Cabarrus County, 1 mile south of the Phoenix mine. >
3
          Pyrite, chalcopyrite, and barite occur in a quartz vein in
 5--
      greenstone country rock. The ore carried about 0.75 ounce per ton of
             In 1884 there was a 175-foot shaft on a vein not over 8 inches
      wide. The ore was treated in a Plattner chlorination plant erected in
8
      1882, but it did not give satisfactory results, and the Mears process
9
      was introduced. A line of old pits and shafts marks the course of
 10-
11
      another vein nearby.
12
      References: Nitze abd Hanna, 1896, p. 123;
14
                   Nitze and Wilkens, 1897, p. 62;
                   Pardee and Park, 1948, p. 72.
 15-
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H.C.)
     Tucker mine
1
     Type: Gold
2
    Location: Lincoln County, near the Old Kidsville Post Office about
3
          2 miles southwest of Denver, on the H. C. Tucker property.
 5-
          Gold occurred in sugary vein quartz and in placers in nearby
     streams in the vicinity of Daly Mountain. In 1935 a caved pit was
7
    the only indication of the workings from which gold was produced 50
    years previously.
9
 10-
    Reference: Pardee and Park, 1948, p. 77.
11
12
     Tuttle's mine
 1
     Type: Gold
2
     Location: Caldwell County.
3
          Gold in placers.
 5-
6
     Reference: Genth and Kerr, 1881, p. 96.
7
 20-
       Tuxler (Drexler) mine
       Type: Gold
  2
       Location: Rowan County, 6 miles east of Salisbury.
       Reference: Pardee and Park, 1948, p. 64.
```

Twin mine 1 Type: Gold 2 Location: Guilford County, 6 miles southwest of Greensboro. 3 4 Two parallel quartz veins were exposed in one tunnel, hence the 5 --name of the mine#. Each vein was about 18 inches wide and separated 6 by 4 feet of slate country rock and carried chalcopyrite and gold. References: Bryson, 1936, p. 105-106; Emmons, 1856, p. 203-204; 10-Kerr and Hanna, 1888, p. 206; 11 Nitze and Hanna, 1896, p. 206; 12 Nitze and Wilkens, 1897, p. 46; 13 Pardee and Park, 1948, p. 63. 14 Twin-Edwards mine 1 Type: Gold, copper 2 Location: Guilford County,  $\frac{1}{2}$  mile southwest of Greensboro and within 3 one mile of the main line of the Southern Railway near Pomona. 5-A sample of the ore assayed in 1903 carried .343 ounce per ton of gold, trace of silver, and .87 percent copper. The mine was worked 7 before the Civil War and was reopened briefly in 1903. References: Pratt, 1904, p. 21; 10-Pratt, 1907, p. 39. 11

1 Twitty, J. D., mine 2 Type: Gold Location: Rutherford County, on Cone Creek 2 miles south of the 3 Rutherford-McDowell county line. 5-6 In 1845 a diamond weighing 1 1/3 carats was found in the gold 7 washings of the J. D. Twitty gold mine. A smaller diamond was 8 recovered from gold washings on the property of C. Leventhrope, nearby. 10-11 Reference: Conley, 1958, p. 65. 12 13 14 15--16 17 18 19 20-21 22 23 24 25-

```
Uharrie (Uharie, Uwharrie) mine
 1
      Type: Gold
      Location: Randolph County, 12 miles southwest of Asheboro, and
      northeast of the Russell mine in Montgomery County.
  5-
           This mine is similar to the Russell mine. The country rock is a
 6
      dark bluish gray silicified tuff, fractured and filled with carbonate
      seams. Bryson reported that the rock carried 12 percent carbonate.
      The mine was worked first before the Civil War, and in 1884 Mr. Henley,
 9.
      who erected a 30-stamp mill. At that time the workings consisted of
  10-
      a 360-foot shaft with levels at 100, 200, and 300 feet. In 1934
11
      Charlie Woodle sank 2 shafts, and worked the surface material.
12
· 13
      References: C. B. Brown, 1934, written communication;
14
                    Bryson, 1936, p. 70-71;
  15-
                    Kerr and Hanna, 1888, p. 253;
16
                    Nitze and Hanna, 1896, p. 60;
 17
                    Nitze and Wilkens, 1897, p. 47.
18
      Union Copper mine
  1
           See Hunnicutt mine, Rowan-Cabarrus County.
 2
 22
       Union Refining and Mining Company mine
 1
           See Star mine, Montgomery County
 2
  25-
```

Upper Creek prospect 1 Type: Lead-zinc 2 Location: Burke County, on the north side of Upper Creek, about 3 miles west of Table Rock. 5-Galena, sphalerite, and chalcopyrite were found in a 25-to 30-6 foot -thick vein of granular quartz parallel to the foliation of the enclosing schist and gneiss. The galena occurs in exhedral cubes as much as 5 mm. across and is said to carry small quantities of silver. The vein was exposed in several prospect pits over a 11 distance of 200 feet. 12 Reference: Bryant and Reed, 1966, p. 8; Reed, 1964, p. 44-45. Upper Mostellar cut 2 Type: Tin Location: Lincoln County, southwest of the Henry shaft, of the Ka-Mi-3 Tin mine. 5-6 Two ore bodies were seen, 4 and 6 feet thick, in greisen gangue in muscovite schist and gneiss wall rock. The cassiterite ore is associated with an uncomformable pegmatite body. 10- Reference: Kestler, 1942, table 18. Uwarra mine 1 See Montgomery mine, Montgomery County

1 Valley River placers, No. 6 vein 2 Gold Type: Cherokee County, along the course of the Valley River Location: near the town of Murphy. No. 6 vein is 1 mile 5-northeast of Murphy. Gold occurs in placer deposits along the river and in quartz veins carrying silver and galena in limestone or marble beds of the Owee series. 10-Exploration work was conducted during the early 1930's 11 with little success. 12 References: Bryson, 1936, p. 148-149; 13 Nitze and Hanna, 1896, p. 192-193. 14 Vanderburg mine 1 See Phoenix mine, Cabarrus County. 47 Varnadore prospect Type: Gold 2 Location: Rowan County, 2 miles northeast of Rockwell. The mine was worked in 1932 by Archie Nash. 5 -References: C. B. Brown, 1934, written communication; Pardee and Park, 1948, p. 64.

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Vein Mountain mine

Type: Gold

Location: McDowell County, on Second Broad River extending from

Vein Mountain about 4 miles northeast to Huntsville Mountain.

The northern end of the tract of 6,800 acres is known as the

Hunt's Mountain or Huntsville Mine.

A series of about 33 gold-bearing quartz veins occur in a belt about  $\frac{1}{4}$  mile wide in crystalline schists. Below the water takle the veins are mineralized with pyrite, chalcopyrite, galena, and sphalerite.

The placer deposits were extensively mined. Before 1896 four shafts, the deepest 117 feet deep, were sunk on the veins, and a 10-stamp mill was erected on the property. In 1908 the deaths, in quick succession, of the mill foreman, two assistants, president, and other officers of the Vein Mountain Mining Co., followed by prolonged litigation, caused the work to be indefinitely suspended. The mill was in fairly good repair in 1934. The mine is said to have operated profitably but production is not known.

References: Bryson, 1936, p. 140-141;

Cameron, 1893, p. 308;

Kerr and Hanna, 1888, p. 314;

Nitze and Hanna, 1896, p. 168-169;

Pardee and Park, 1948, p. 77.

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Vickery and Lauder mine
1
     Type: Gold
2
     Location: Guilford County, near Jamestown:
     References: Nitze and Hanna, 1896, p. 116;
 5-
                  Pardee and Park, 1948, p. 63.
6
    Vinson's Half Acre mine
    See Wyatt mine, Union County. (
9
       Vista mine
       Type: Copper
       Location: Mecklenburg County, Crab Orchard township.
3
 5-
            In 1901 the mine was being developed.
6
       Reference: Pratt, 1902, p. 26.
8 -
18
      Wade mine
 1
           See Eury mine, Montgomery County
 2
     Waldrope property
2
     Type: Copper
     Location: Macon County, southwest of Franklin near the base of
3
          Nantahala Mountain.
 5--
          Probably chalcopyrite similar to the Patton prospect.
     Reference: Smith, 1875, p. 114.
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Walker mine
        Type: Gold
 2
       Location: Mecklenburg County, 8 miles west of Charlotte.
 3
                    Pardee and Park, 1948, p. 63.
       Reference:
 6
      Ward mine
      Type: Gold
      Location: Davidson County, 2 miles east of Cid, and 1 mile west of
      the Delk mine. in Randolph County.
 5-
          Crystallized gold occurred in red siliceous clay pockets in quartz
6
      veins in a bedded fragmental acid tuff. Chalcopyrite, pyrite, and
7
      electrum were noted. A rich gravel, 1 to 14 feet thick, covered the
8
      surface of many acres about the mine. The mine was worked from 1853
9
      to 1882, and from 1895 to 1905, and in the 1920's.
                                                           The saprolites
 10-
      between the shaft and Lick Creek were worked in the 1930's.
11
12
      References: C. B. Brown, 1934, written communication;
13
                  Emmons, 1856, p. 137-139;
14
                  Kerr and Hanna, 1888, p. 274;
 15-
                 Pogue, 1910, p. 118.
16
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Warne, (Warren, Jook C. Moore) mine 1 Type: Gold 2 Location: Clay County, on Brasstown Creek near the North Carolina 3 State line. 4 5-Gold deposits occur in quartz veins near the contact of Cambrian schists with Precambrian rocks. M. R. Hilford of Hendersonville conducted exploration and development work in 1934 and 1935. A 40-foot shaft was sunk and a 10-stamp mill was shipped to the property, but was never erected. 10-11 References: Bryson, 1936, p. 149; 12 Kerr and Hanna, 1888, p. 318. 13 Washington mine See Bonnie Belle mine, Union County. Washington mine See Silver Hill mine, Davidson County. 2 Watauga prospect 1 Type: Copper Location: Macon County, on the east side of Watauga Creek, 6 3/4 3 miles portheast of Franklin. Chalcopyrite, pyrite, and pyrrhotite ore occurs as mineralized 6 wall rock varying considerably in richness. A small amount of copper 7 ore was mined in 1930. 8 Reference: Hunter and Gildersleeve, 1946, p. 19.

```
Wayehutta mine
     Type: Copper
     Location: Jackson County, on Wayehutta Creek, about 6 miles southeast
           of Sylva.
 5-
          Massive sulfide ore consisting principally of pyrrhotite, with
      chalcopyrite, sphalerite, pyrite, and rare galena occurs in quartz-
     mica gneiss of the Carolina Gneiss. The mine was worked in the 1860's,
     and was last opened in the 1930's by the Carolina Copper Company of
     West Detroit, Michigan. The mine was investigated by the Tennessee
 10-
11
     Valley Authority in 1942. The deposit has been opened by an adit
      and a drift to the north, about 200 feet long, two shafts 30 to 50
12
      feet deep, and several shallow prospect pits.
13
14
     Reference: G. H. Espenshade, 1944, written communication;
16
                  Ross, 1935, p. 90-91;
17
                  Smith, 1875, p. 113;
18
                  Weed, 1911, p. 137.
19
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1
      Weathers, Julia, prospect
      Type:
            Tin
2
      Location: Gaston County, about 1 mile southwest of the Jenkins
3
           farm prospects.
 5-
           Two ore bodies were found containing cassiterite in greisen
      gangue in muscovite schist and gneiss. The ore bodies are conformable
7
      with the wall rocks. Rich float ore was found.
      Reference: Kesler, 1942, table 18.
 10-
11
     Welborn (Smith) mine
1
     Type: Gold, silver, lead
     Location: Davidson County, 2 miles west of Silver Hill.
3
        Narrow quartz lenses containing galena, sphalerite, pyrite, and
 5-
     chalcopyrite with gold and silver resemble those at the Silver Hill
     mine. The country rock is schist derived from andesitic tuff. A
7
     shaft was sunk at this mine in 1882, and 6 to 8 tons of ore per day
     were produced until the mine closed in June 1883.
 10-
     References: Kerr and Hanna, 1888, p. 199;
11
                  Nitze and Hanna, 1896, p. 68;
12
                  Pardee and Park, 1948, p. 62;
13
                  Pogue, 1910, p. 106.
14
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Wells' Farm
      Type: Copper
2
      Location: Gaston County.
3
           The minerals noted include magnetite, hematite, pyrite, azurite,
      bornite, rutile, garnet, zircon, beryl, tourmaline, monazite,
6
      mendaccanite.
7
      Reference: Genth and Kerr, 1881, p. 103.
     Wenona mine
 1
     Type: Gold
    Location: Union County.
    Reference: Pardee and Park, 1948, p. 65.
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Westfeldt Frospect 1 2 Copper - zinc Type: 3 Swain County, about  $\frac{1}{2}$  mile N. 48° E. of the Hazel Location: Creek Mine, along a tributary of Haw Gap Branch. -5-Chalcopyrite and pyrrhotite are disseminated in a zone parallel to the foliation in beds of fine-grained 7 sandstone alternating with beds of graphitic phyllite and siltstone. A composite sample of the ore dump assayed 0.19 percent copper and 0.11 percent zinc; a 10-11 sample of the richest-looking ore assayed 0.56 percent copper and 0.20 percent zinc. The mine was opened 12 about 1900 when 5 adits and 2 shafts were dug for a 13 distance of 600 feet along a small tributary of Haw 14 Gap Branch. About 300 tons of material lay on the 15-16 main dump in 1943. 17 Espenshade, 1963, p. 35. Reference: 18 Wetherbee mine 1 Type: Gold 2 Location: Polk County, South Mountain area. 3 Gold placers. Reference: Nitze and Hanna, 1896, p. 174.

```
1
     WGN mine
     See Gold Hill mine, Rowan County.
2
3
     White (Col. White's) mine
1
     Type: Gold
2
     Location: Cabarrus County.
          Chalcopyrite and aikinite was noted in the ore.
 5-
6
     References: Genth, 1891, p. 27;
7
                  Genth and Kerr, 1881, p. 96;
                  Kerr and Hanna, 1888, p. 347.
13
    White Bank mine
    Type: Gold
2
    Location: Burke County, lower slope of Pilot Mountain.
 5--
         This was a placer mine.
7
    References: Nitze and Hanna, 1896, p. 165;
                Pardee and Park, 1948, p. 62.
24
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U. S. GOVFPYNTER PROPERTY

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Whitehead prospect
1
      Type: Gold, copper
2
      Location: Guilford County, south of Jamestown, between, Jacks Hill
3
           and Aberdeen mines.
 5-
            This mine is on the same quartz vein as the North State, and
       the character of the vein is described under that mine. Several
       shallow shafts were seen, but this property was largely unprospected
       in the 1930's.
 10~
       References: C. B. Brown, 1934, written communication;
11
                    Nitze and Hanna, 1896, p. 115;
12
                    Pardee and Park, 1948, p. 76.
13
      White House property
 1
      Type: Gold
 2
      Location: Franklin County, between the Portis mine and Fishing Creek.
 3
            The White House property, 713 acres, was acquired by the Norlina
  5-
      Mining Company in 1935.
 6
 7
      Reference: Bryson, 1936, p. 58.
័ន
     White mers Valley placer
 1
      Type: Gold
 2
      Location: Macon County, in the southeast corner.
           Gold placers.
  5 -
```

Reference: Pardee and Park, 1948, p. 63.

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Whiterock Creek prospect
1
    Type: Copper
2
    Location: Jackson County, about 150 yards below the junction of
3
         Dodgen and Whiterock Creeks.
 5-
         A quartz vein carrying pyrite, but no copper minerals in horn-
6
    blende - feldspar gneiss country rock was explored by a shallow pit.
7
    Reference: G. H. Espenshade, 1944, written communication.
      Whiteside mine
1
      Type: Gold
2
      Location: Cleveland County,
3
           Gold occurs in placers.
 5-
6
      Reference: Genth and Kerr, 1881, p. 100.
7
     Whitesides, J. W., and L. A. C. Kizer prospects
 1
      Type: Tin
 2
      Location: Gaston County, about 1/4 mile west of the Jenkins prospects
          Cassiterite occurs in two ore bodies each 2 feet thick in greisen
  5-
      gangue in muscovite schist or gneiss. The ore bodies are conformable
     with the wall rock. Shallow pits were found filled in 1942.
 7
     Reference: Kesler, 1942, table 18.
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Whiting prospect

Type: Copper

Location: Graham County, on Fax Creek one mile south of the Little

Tennessee River.

Disseminated pyrrhotite and fine-grained pyrite occur in massive sandstone. No copper sulfides or stains were observed. Shallow pits were sunk about 1939 by D. B. Burns of Asheville, N. C., at two sites along an abandoned lumber railroad.

Reference: Espenshade, 1963, p. 36.

Whitney group (McMakin, Silver, Mauney, Isenhour, Fritz-Honeycutt)

Type: Gold, silver

more plentiful.

Iocation: Cabarrus County, extending from about  $1\frac{1}{2}$  miles to 3 miles southwest of Gold Hill. These mines are on the same lode and were consolidated as the Whitney group in the late 1890's.

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The Whitney lode is a silicified shear zone, from a few feet to 50 feet wide, and stakes approximately parallel to the foliation of the gray slate country rock. The lode consists of numerous quartz layers alternating with silicified slate. Gold, rather than copper, predominates in the ore which is auriferous pyrite and chalcopyrite. Films of native gold, later than the pyrite, were deposited in some places between layers of schist. Manganese ores were noted at the surface. Below a depth of 60 feet argentiferous galena, sphalerite, and tetrahedrite became

# Whitney group (Con't)

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The McMakin mine was opened sometime between 1842, when the first gold discovery in the Gold Hill area was made, end the cuttook of the Civil How. The wine above down during the war but wer repend afterward and was operated until 1861. The records on the other mines are even more scanty and nothing is recorded of their early history. The Whitney Reduction Co., owned the entire lode in 1899 and produced gold through 1906. The McMakin mine was developed at that time by 3 shafts, the deepest of which was 700 feet, and many underground workings. In 1935 the Milton Hersey Co., Ltd., of Montreal, Canda, opened the 700-foot shaft to a depth of more than 245 feet, and opened up 2,000 feet of drifts and stopes in an unsuccessful attempt to reactivate the mine. The production from 1899 to 1906 was \$62,500 in gold. In 1906, Ianey reported a developed reserve of 1,500,000 tons averaging 0.125 ounce per ton of ore.

References: Bryson, 1937, p. 17;

Kerr and Hanna 1887, p. 192-193, 265-266, 347;

Ianey, 1910, p. 79, 82, 108-110;

Nitze and Hanna, 1896, p. 89-90;

Nitze and Wilkens, 1897, p. 60;

Pardee and Park, 1948, p. 88-91.

1 Widenhouse mine Type: Gold, silver 2 Location: Cabarrus County, 3-3/4 miles northwest of Georgeville. The vein is located in a zone of chlorites schist. References: Nitze and Hanna, 1896, p. 91; Pardee and Park, 1948, p. 62. Wilhelmina mine 1 Type: Gold 2 Location: Mecklenburg County, 5 miles west of Charlotte. In 1906 development work was done by Messrs. C.A. Ames and 5-W.D.Rock on a quartz vein carrying gold and sulfides. An old 75-foot shaft was cleaned out, a 100-foot vertical shaft was sunk, and a 10stamp mill-was installed. A  $2\frac{1}{2}$ -3 foot vein was cut at the 75-foot level. The mine produced about \$10,000 to \$12,000 in eighteen months. 10-Reference: Pratt, 1907, p. 66. 11 21 22 24

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1
     Wilkins Creek mine
     Type: Copper
     Location: Haywood County, on Wilkins Creek, about 2 miles southeast
          of Waterville Dam on the Pigeon River.
  5-
          Massive pyrrhotite and chalcopyrite ore occur in a vein 4 to 6
 6
     feet wide in slate country rock. The ore is overlain by gossan at
 7
     the surface. The mine has not been worked since the 1860's, and the
     workings, consisting of several 20-50 foot shafts, an 80-foot drift,
     and several pits and trenches, are caved in.
11
12
     References: Hunter and Gildersleeve, 1946, p. 18.
13
                   Smith, 1875, p. 112;
14
                   Tennessee Valley Authority, 1942, written communication.
      Williams mine
 1
      Type: Gold
 2
      Location: Chatham County.
           Galena and chalcopyrite were noted in the ore,
  5-
      Reference: Genth and Kerr, 1881, p. 99.
22
       Williams mine
 2
       See Mc Cleary mine, Mecklenburg County.
  25-
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```
Willis Hill mine
 1
           See Millis Hill mine, Guilford County.
 2
        Wilson, A.J., mine
        Type: Gold
 2
        Location: Mecklenburg County, 11 miles south of east of Charlotte,
 3
             south of the Ferguson Hill mine, and \frac{1}{2} mile southwest of
             Mungo's store.
             Gold occurs in one of a series of northwest-southeast trending
 7
        quartz veins. The ore zone was 8 to 14 wide carrying compact hematite
        and pyrite. The mine was first opened in 1895 to a depth of 30 feet.
  10-
        References: Nitze and Hanna, 1896, p. 144, 145.
_ 11
  15--
       Wilson, Frank, mine
  1
       Type: Gold
 2
       Location: Mecklenburg County, near Charlotte,
 3
       References: Kerr and Hanna, 1888, p. 293;
  5-
                    Nitze and Hanna, 1896, p. 131;
  6
                    Pardee and Park, 1948, p. 63.
 24
  25
```

```
Wilson Kindley mine
 1
      Type: Gold
 2
      Location: Randolph County, 1/2 mile southwest of the Hoover Hill
 3
           mine. ~
  5-
           Said to be
This mine is similar to the Hoover Hill. No veins were seen in
 6
      siliceous rhyolite country rock. The owner in 1934 claimed that no
 7
      gold was found here except what was salted from the Hoover Hill mine.
      The mine was worked for a few months in 1881 by a New York company;
      Workings consisted of one tunnel, and a 40-foot shaft.
 10-
11
      References: C. B. Brown, 1934, written communication;
12
                    Kerr and Hanna, 1888, p. 257;
13
                    Nitze and Hanna, 1896, p. 57.
14
                    Nitze and Wilkins, 1897, p. 47.
 15-
16
17
18
19
 20~
21
22
23
24
  25-
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11

Reference: Conley, 1958, p. 33.

```
Wilson, Stephen, mine
 1
      Type: Gold
 2
      Location: Mecklenburg County, 9 miles west of Charlotte, and 4 miles west
 3
           of the Capps mine:
  5-
           Ten quartz veins carrying gold, pyrite, and chalcopyrite were
      found in granite country rock. Two of these veins were worked in the
 7
      1870's and 1880's. One vein extending for at least 800 feet was
      developed in 1878 by an inclined shaft 400 feet deep, from which drifts
      extended for a distance of 1,500 feet.
 10~
11
      References: Bryson, 1936, p. 117;
12
                   Genth and Kerr, 1881, p. 111;
, 13
                   Kerr and Hanna, 1888, p. 294;
14
                   Nitze and Hanna, 1896, p. 133;
  15-
                   Pardee and Park, 1948, p. 80.
16
      Wilton mine
 1
      Type: Molybdenum
 2
      Location: Granville County, 2 miles east of Wilton. Take North
 3
            Carolina Highway 56 east out of Wilton for 2.6 miles turning
            north on an unpaved road for 0.4 mile, and take the west fork
  5 -
            for 0.9 mile to a state highway quarry.
 6
            Molybdenite filling fractures in granite was found in the
      quarry.
```

```
Winningham mine
  1
       Type: Gold
 2
       Location: Randolph County, 2½ miles south of Asheboro or 2½ miles
            northeast of Asheboro.
  5-
            In 1934 two pits were seen in silicified andesitic tuff country
 6
       rock. The mine is said to have been salted.
       References: C. B. Brown, 1934, written communication;
                    Kerr and Hanna, 1888, p. 253;
  10-
                    Nitze and Hanna, 1896, p. 59;
 11
                    Nitze and Wilkens, 1897, p. 47;
 12
                    Pardee and Park, 1948, p. 64.
, 13
      Winslow mine
  1
       Type: Gold
  2
      Location: Randolph County, 5 miles southwest of Asheboro.
  3
      References: Kerr and Hanna, 1888, p. 253;
   5--
                    Nitze and Hanna, 1896, p. 60;
  6
                    Nitze and Wilkens, 1897, p. 47;
  7
                    Pardee and Park, 1948, p. 66.
  8
      Wolf Creek (Wolf County) prospect
  1
       Type: Copper
  2
 3
       Location: Jackson County, southwest of Cullowhee mine,
16
      References: Smith, 1875, p. 113;
17
                   Weed, 1911, p. 137.
```

1 Wolverine mine Type: Gold 2 3 Location: Rutherford County, 4 miles from Rutherfordton. 5-6 A quartz vein, about 18 inches wide, carrying gold was first worked by the Rutherford Gold Company, probably in the 1830's or 1840's, for an old tunnel on the property known as the Bechtler tunnel, may have been named after Christian Bechtler, a Rutherford-10ton jeweler who minted coins from locally mined gold during the years 11 from 1830 to 1857. In 1905 the Wolverine Gold Mining Company sank 12 a 100-foot shaft on the vein. ູ 13 14 References: Nitze and Hanna, 1896, p. 153-154; 15-Pratt, 1905, p. 14-15. 16 1 Woodruff mine See Woolworth mine, Mecklenburg County. 2 1 Woods Fram prospect 2 Type: Copper 3 Location: Jackson County, about  $1\frac{1}{2}$  miles southeast of the Moody prospect. No copper minerals were seen, but small quartz veins and con-6 siderable epidote stringers occur in biotite schist. Several shallow 7 pits have been dug. Reference: G. H. Espenshale, 1944, written communication.

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### Woodward-Hedgepath tract

Type: Gold

Location: Nash County, 2 miles from Nashville.

A vein of cellular quartz 3 feet wide carrying pyrite was opened for a distance of 1 mile about 1896. Adjacent were aurejerous slates.

Reference: Nitze and Hanna, 1896, p. 27.

## Woolworth (Woodruff, Grier) mine

Type: Gold

Location: Mecklenburg County, 1 to 3 miles southwest of Charlotte, south of the Trotter mine and  $\frac{1}{2}$  mile south of Highway 20.

A vein 2 to 20 feet wide, similar to that at the Rudisil / mine, was mined in the late 1800's and was closed down in July, 1901. It was reopened in November, 1906, and was worked for 5 or 6 months. The workings include one 100-foot shaft with drifts at the 75-foot and 100-foot levels, two 65-foot shafts 300 and 400 feet from the deep shaft, and many pits and open cuts. About 3,000 tons of ore was mined in 1906-1907, and one carload was shipped which was worth \$24 per ton.

References: J.V. Lewis, 1934, written communication; Pardee and Park, 1948, p. 63; Pratt, 1907, p. 69; 1914, p. 22.

18

16

15-

Worth Mine 1 2 Type: Gold 3 Montgomery County, 1 mile southeast of the Moratock Location: mine, near the junction of the  $reve{\phi}$ wharrie and Yadkin 5-Rivers 7 This was a placer mine. 8 References: Conley, 1962, p. 17; Nitze and Hanna, 1896, p. 80; 10-Pardee and Park, 1948, p. 63 11 Wright mine 1 Type: Gold Location: Gaston County, 4 miles south of Belmont. 3 Pardee and Park, 1948, p. 62. Reference: 5-Wright mine 1 Type: Gold 2 Location: Moore County, 150 feet northeast of the Clegg mine. 3 4 The Wright mine is a continuation of the vein at the Clegg mine. 5--The ore is disseminated through a manganese-stained fault gouge. Before 1862 a shaft was sunk on the property. In 1912, J.W. Wright 7 put down a second shaft to a depth of 260 feet. 8 9 References: Conley, 1962 a, p. 24-25; 10-Pardee and Park, 1948, p. 64.

```
Wright, Pink, prospect
 1
      Type: Tin
2
      Location: Gaston County, about 3/4 mile southwest of the Julia
           Weathers prospect.
           Cassiterite in greisen gangue in muscovite schist and gneiss.
7
      Reference: Kesler, 1942, table 18.
8
9
 10-
    Wyatt (Wiatt, Vinson's Half Acre) mine
1
     Type: Gold
2
     Location: Union County, near the Howie mine
3
          The geology is the same as the Howie mine. This mine is one
 5-
     of the "Grand Union Gold Mine," a tract of 1941 acres comprising the
     Howie, Bonnie Belle, Wyatt, Penman mines, in the 1800's.
7
                1888,
Kerr and Hanna, p. 261;
     Reference:
9
                 Lieber; 1858, p. 56-57;
 10-
                 Pardee and Park, 1948, p. 65.
11
22
23
24
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Yadkin (Tuck) mine
     Type: Gold
     Location: Rowan County, southwest of Salisbury, and east of the
3
          Southern Railroad.
 5-
     The ore carried gold and pyrite.
7
     References: Genth and Kerr, 1881, p. 116;
                  Nitze and Hanna, 1896, p. 117.
 1
     Yancey mine
     See Dungy mine, Person County.
 2
13
 1
      Yellow Dog mine
 2
      See Isenhour mine, Mecklenburg County.
17
      Young's Crossroads
 1
      Type: Gold
 2
      Location: Granville County.
 3
            Gold and pyrite were noted.
  5 --
      Reference: Genth and Kerr, 1881, p. 103
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1	Appendix I								
2	List of mines and prospects by county								
3	Abbreviations for type of deposit								
4		Au	gold						
5-		Ba.	barite						
6	'	Co	cobalt						
17		Cu	copper					·	
8		Мо	molybdenum						•
9		Pb	lead						
10-		Py .	pyrite						
11		R-E	rare earths				-		
12		Sn	tin						
13		W	tungsten						
14	,	Zn	zinc			:			
15	Name	~						Туре	of Deposit
16	Alamance	County							
17	Anthony mine							Au	
18	Boyd mine							Au	
19	Dixon's mine						Au		
20-	Foust mine						Cu		
21	Holt mine							Au	
22	McAden mine							Au	
23	Newlin's mine						Au		
24	Alexander County								
	Barnes mine Au						Au		

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,							
1	Alleghany County						
2	Harris, H. prospect	Cu					
3	Peachbottom (Maxwell) mine	Cu, Pb					
4	Phipps prospect	Ba					
5-	5- Anson County						
6	Cox, Jesse mine	Au					
7	Hamilton (Bailey) mine	Au					
8	Ashe County						
9	Gap Creek (Copper Knob, Deep Gap)						
10-	mine	Cu, Au					
11	Garvey, W. H. prospect	Cu					
12	Ore Knob mine	Cu					
13	Rich Knob prospect	Cu					
14	Avery County .						
15	Gragg placers	Au .					
16							
17							
'18	· ·						
19	•						
20-							
21							
22							
23							
24							
	•						

1	Burke County					
2	Brown Mountain mine	. Au c				
3	Carolina Queen mine	Au				
4	Glen Alpine mine	Au				
5	Hancock mine	Au				
ő ,	Hodge (Hedge) mine	Au				
7	Hunts Mountain mine	Au				
8	Magazine mine	Au				
9	Mills, J. C. mine	Áu				
10-	Upper Creek prospect	Pb, Zn				
11	White Bank mine	Au				
12	Cabarrus County					
13	Allen-Boger mine	Au				
14	Allison mine	Au				
15—	Arey mine	Au				
16	Bangle mine	Au				
17	Barber mine	Au				
18	Barnhardt mine	Au				
19	Barrier mine	Au				
20—	Blackwelder mine	Au				
21	Boger, Dan mine	Au				
22	Bost, Charlie mine	Au				
23	Buffalo mine	Au				
24	Cabarrus mine	Au				
	Cline (Cruse) mine	Au, W				

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I	Coates mine	. Au	
2	Crayton mine	Au c	
3	Crosby (Cosby, Poplan) mine	Au	
4	Crosby No. 2 mine	Au	
5-	Crowell's mine	Au	
б	Cullen's mine	Au	
7	Dixie Queen (Newell) mine	Au	
8	Ellsworth mine	Au	
9	Elwood mine	Au	
10 –	Faggart mine	Au	
11	Fisher mine	Au	
12	Flowe's mine	Au	
13	Furness (Furniss, Firness) mine	Au	
14	Furniss Furr mine	Au	
15	Furr, Allen (Eva Furr, Silver		
16	Valley, Midas)	Au	
17	Gannon mine	Au	
18	Garman (Gorman) mine	Au	
19	Gibb mine	Au	
20-	Harkey "diggings"	Au	
21	Harkey mine	Au	
22	Harris mine	Au	
23	Heglar mine	R-E	
24	Heilig mine	Au	
	Hill mine	Au	

,			
1		Hopkins No. 1 mine	Au
2		Hopkins, Dan (Hopkins No. 2) mine	Au
3		Klutz (Kluttz) mine	Au
4	()	Linker mine	Au
5-		Litaker mine	Au
ő		Long mine	Au
7		Love mine	Au
8		Ludowick mine	Au
9		Meadow Creek mine	Au
10-		Montgomery mine	Au
11		Morrison mine	Au
12		Narville mine	Au
13		Nash and Plott mine	Au
14		No. 3 mine	Au
15		No. 813 mine	Au
16		Nugget (Biggers, New Nugget) mine	Au
17		Orchard mine	Au
18		Phoenix (Miami, Vanderburg) mine	Au
19		Pioneer Mills mine	Au
20—		Quaker City mine	Au
21		Reed (Reid) mine	Au
22		Reed, Joel mine	Au
23		Rocky River (Jake Shin, Tom Shin)	
24		mine	Au
		Rogers mine	Au

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1	Sanders (Saunders) mine	Au
2	Smith placer	Au
3	Snyder mine	· Au
4	Spears mine	Au
5-	Stallings mine	Au
ő .	Sulphur mine	Au
7	Taggart mine	Au
8	Trautman (Troutman) mine	Au
9	Tucker (California) mine	Au
10 ر	White (Col. White's) mine	Au
11	Whitney Group (McMakin, Silver,	
12	Mauney, Isenhour, Fritz-	
13	Honeycutt) mines	Au
14	Widenhouse mine	Au
15—		
16		
17		
18		
19		
20		
21		
22		
23		
24		

1	Caldwell County	
2	Baker (Baker Hill) mine	Au, Pb, Ag
3	Bald Knob mine	Au
4	Bee Mountain mine	Au
5	Corpening mine	Au
6	Flemming (Fleming) mine	Au
7	Francis mine	Au
8	Grandfather Mountain prospects,	-
9	east side	Au
10-	Hercules mine	Au
`11	Little John mine	Au
12	McKenzie mine	Au
13	Michaux mine	Au
14	Miller mine	Au
15	Nibelong (Niebelung, Blue Ridge)	
16	mine	Au
17	Old Miller mine	Au
18	Pax Hill (Packe's Hill) mine	Au
19	Scott Hill mine	Au
20-	Tuttle's mine	Au
21		
22		
23		
24		
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Catawba County	
Abernathy mine	. Au
England mine	Au
McCorkle mine	Au
McCubb mine	Au
Peachtree mine	Au
Rufty mine	Au
Shuford mine	, Au
Shuford, A. D. mine	Au
Chatham County	
Bear Creek mine	Cu
Chatham mine	Au
Chick mine	Cu
Clegg mine	Cu
Danelly's Creek mine	Au
Phillips (Millright) mine	Cu, Au
Sloan mine	Cu
Snipe's mine	Au
Williams mine	Au
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i		
1	Cherokee County	
2	Axel's Shaft on Marble Creek	Au
3	Beaverdam Bald prospect	Cu
4	Little Bald prospect	Cu
5-	No. 6 mine	Au
6	Parker mine	Au
7	Ramsay, M. mine	Au
8	Tatham (Tathour) Creek placers	· Au
9	Valley River placers	Au
10-	Clay County	
11	Kitchens mine	Cu
12	Warne (Warren, John C. Moore) mine	Au
13	Cleveland County	
14	Blue Ridge Tin Corporation mine	
15	works	Sn
16	Bonnie Mill prospect	Sn
17	Compact School, prospect 1,675	
18	feet S. 60°E.	Sn
19	Compact School, prospect 3,000	
20—	feet S. 64°E.	Sn
21	Compact School, prospect 3,205	
22	feet S.3°E.	Sn
23	Dixon School prospect	Sn
24	Durham mine	Au
	Faires mine	Sn

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1	Falls prospect	Sn
2	Kings Mountain mine	Sn
3	Kings Mountain town prospects	Sn
4	Ledoux prospects	Sn
5-	Mauny Park prospect	Sn
6	Mountain mine	Au
7	Patterson, J. farm prospect	Sn
8	Plonk, Mike prospect	, Sn
9	Ross prospect	Sn
10-	Ross prospect, southwest of	Sn
11	Shiloh Church prospect	Sn
12	Summers, Frank farm prospect	Sn
13	Whiteside mine	Au
14	Davidson County	
15—	Allred, Billy mine	Au
16	Baltimore mine	Au
17	Beck's, David mine	Au
18	Black mine	· Au
19	Boss mine	Au
20-	Briggs mine	Au
21	Brown mine	Au
22	Cid mine	Cu, Au, Ag
23	Conrad Hill (Dodge Hill) mine	Au, Cu
24	Cross mine	Au
-	Denton mine	Au

		<del></del>
1	Emmons (Davidson, Hercules) mine	Au, Cu
2	Eureka mine	Au
3	Harris mine	Au
4	Headrick mine	Cu, Au
5-	Hepler mine	Au
6	Hepler, Claude (Hegler) mine	Au
7	Hoover mine	Pb
8	Hunt mine	Au
9	Ida mine	Au
10-	Lalor (Allen) mine	Au, Cu
11	Laughlin mine	Au
12	Liberty Mining Co. mine	Au
13	Loftin (Laftin, Laffing) mine	Au
14	Midway mine	Au
15	Miller mine	Au
16	Moore mine	Au
17	Morgan mine	Au
18	Nooe mine	Au
19	Norlina (Nor-Lin) mine	Au
20—	Ore Knob mine	Au
21	Peters mine	Au
2 <b>2</b>	Plyler mine	Au
23	Russell mine	Au
24	Secrest (Sechrist) mine	Au
~ .	Silver Hill (Washington, King's)	Au. Ag. Pg.Zn

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1	Silver Valley (Spring Valley) mine	Au,Ag,Pb,Zn
2	Symonds mine	Au
3	Ward mine	Au
4	Welborn (Smith) mine	Au, Ag, Pb
5-	Davie County	
6	Butler (County Line) mine	Au
7	Callahan Mountain mine	Au
8	Gray mine	Au
9	Isaac Allen mine	Au
10-	Franklin County	
11	North Carolina mine	Au
12	Portis (Sturgess) mine	Au
13	White House property	Au
14	Gaston County	
15—	Allen prospect	Sn
16	Allen prospect, 2,225 feet N.70°W	Sn
17	Baldwin prospect	Sn
18	Baryte mines	Ba
19	Beattie (Sam Beattie) mine	Au
20-	Berry, E. A. prospect	Sn
21	Burrell Wells (V. W. Smith) mine	Au .
22	Cannon mine	Au
23	Cansler and Shuford mine	Au
24	Carpenter, J. M. L. prospect	Sn
	Clark, Gus prospect	Sn

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•		
1	Clemmer mine	Au
2	Cole farm prospect	. Sn
3	Cross (Peysour) Mountain	Co
4	Crowder's Mountain (Caledonia) mine	Au
5-	Dameron mine	Au
6	Derr mine	Au
7	Duffie mine	Au
8	Eddleman (Berry, Holland) mine	Au
9	Farrar mine	Au
10-	Ferguson mine	Au
11	Gap mine	Au
12	Hastings prospect	Sn
13	Hastings, Paul prospect	Sn
14	Hayes mine	· Au
15—	High Shoals mine	Au
16	Holland prospect	Sn
17	Horton, J. C. shaft (Chestnut Hill	
18	vein)	Sn
19	Hovis, M. V. prospect	Sn
20-	Jenkins farm prospect	Sn
21	Jones mine	Sn
22	Kings Mountain (Cetawba, Briggs)	
23	mine	Au, Pb, Zn
24	Kizer, L. A. C. prospect	Sn
,	Kizer-Mauny farm prospect	Sn

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i		•
1	Lawton mine	Pb, Zn
2	Lineberger mine	Au
3	Long Creek mine	Au
4	McClurd mine	Au
5-	McLean (Rumfeldt) mine	Au
6	Mauny, Fred prospect	Sn
7	Metcalf prospect	Sn
8	Oliver mine	Au
9	Oliver (Crouse, Pasour) mine	Py
10-	Oliver No. 2 mine	Au
11	Ormond mine	Py, Co, Au
12	Ormond-Carr prospect	Sn
13	Ormond, J. A. prospect	Sn
14	Ormond, M. farm prospect	Sn
15	Patterson mine	Au
16	Plonk, John farm prospect	Sn
17	Puett mine	Au
18	Ramseur Mill prospect	Sn
19	Rayfield prospect	Sn
20—.	Reese mine	Au
21	Rhodes mine	Au
22	Rhyne mine	Au
23	Robinson mine	Au
24	Seaman prospect	Sn
	Sloan mine	Au

,		
	Smith mine	Au
	Stroup prospect	Sn Sn
	Weathers, Julia prospect	Sn
5-	Wells' farm	Cu
,	Whitesides, J. W. prospect	Sn
i	Wright mine	Au
	Wright, Pink prospect	Sn .
ł	nam County	
	Kitchen prospect	Cu
0-	Whiting prospect	Cu
Grai	nville County	
	Annie Maud prospect	Cu
	Big America (Royster) mine	Cu
	Blue Wing mine	Cu
5—	Cornfield (Eustis) property	Cu
	Ford prospect	Cu
	Fourth of July mine	Cu
	Frazier mine	Cu
	Holloway mine	Cu
0-	Mastodon (Pocahontas) mine	Cu
	Pannebakér prospects	Gu
	Seat prospect	Gu
	Silver Nugget mine	Cu
	Tuck mine	Cu

,		
1	Wilton mine	Мо
2	Young's Crossroads	Au
3	Guilford County	
4	Aberdeen (Horney Ridge) mine	Au, Cu
5 —	Ball mine	Au
6	Beard mine	Au
7	Beason mine	Au
8	Bolton prospect	Au
9	Cambridge mine	Cu
10-	Deep River (Coffin) mine	Au, Cu
11	Eudy mine	Au
12	Fisher Hill mine	Au
13	Gardner Hill mine	Au, Cu
14	Gibson mine	Au
15	Harlan (Harland) mine	Au, Cu
16	Heath (Donnell) mine	Au
17	High Point mine	Au
18	Hodges (Hodgins) Hill mine	Au
19	Hoover mine	Au
20	Horwitz mine	Au
21	Hudson mine	Au
22	Jacks Hill mine	Au, Cu
23	Lindsay mine	Au, Cu
24	Millis Hill (Willis Hill) mine	Au
	North Carolina (Fentress) mine	Au, Cu

2		
1	North State (McCullough) mine	Au, Cu
2	Oak Hill mine	Au
3	Palachian mine	Au, Cu
4	Phoenix mine	Cu
5-	Pine Hill mine	Au
6	Puckett mine	Au
7	Releigh mine	Au
8	Twin mine	Au
9	Twin=Edwards mine	Au, Cu
10-	Vickery and Lauder mine	Au
11	Whitehead prospect	Au, Cu
12	Halifax County	
13	Davis mine	Au
14	H. and H. mine (House property)	Au,Cu,Pb,Zn
15	Jones-Boy Scout mine	Mo
16	Kearney mine	Au
17	Mann mine	Au
18	Moss-Dryden (Moss-Richardson) mine	Mo
19	Nick Arrington mine	Au
20—	Taylor mine	Au
21	Thomas mine	Au
22	Haywood County	
23	Redman (Redmond, Fines Creek) mine	Cu
24	Wilkins Creek mine	Cu

Henderson County	
Boylston (Boilston) mine	. Au
Pardo (Little Hungry River, Brown)	
mine	Pb
Jackson County	
Brendle Knob mine	Cu
Brinkley (Allison) mine	Cu
Buck Knob prospect	Cu
Cambuco mine	Cu
Cany Fork Bald prospect	Cu
Casher's Valley placer	Au
Cherry Gap mine	Cu
Coggins prospect	Cu
Cullowhee mine	Cu
Davies mine	Cu
Fairfield Valley (Georgetown) placer	Cu
Gunstocker prospect	Cu
Hooper Branch prospect	Cu
Hornbuckle prospect	Cu
Loudermilk mine	Cu
McClure prospect	Cu
Moody prospect	Cu
Panther Knob prospect	Cu
Phillips (Lovedahl) prospect	Cu
Poor Ridge mine	Cu

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coefficiently  $\alpha = \sin \beta$  .

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tt Savannah (Belis Gap, New Savannah) mine	Cu
Scott's Creek prospect	Cu
Shell Ridge prospect	Gu
Sugarloaf Mountain prospect	Cu
Tickasegee mine	Cu
Nayehutta mine	Cu
Whiterook Greek prospect	Cu
Wolf Creek (Wolf County) prospect	Cu
Woods Farm prospect	Cu
County	
Clegg mine	Cu
Sanford mine	Au

. 1. S. GOVERNMENT 'S

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1	Lincoln County	
2	Burton mine	Au
3	Carpenter, S. T. prospect	Sn
4	Cherry mine	Au
5-	Condon (Main) shaft	Sn
6	Gates, J. E. shaft	Sn
7	Graham mine	Cu, Au
8	Hauss (House) mine	Au
9	Henry shaft	Sn
10-	Hoke mine	Au
11	Jake open cut	Sn
12	Ka-Mi-Tin mine	Sn
13	Macpelah Church prospect	Cu
14	Mostellar, J. vein	Sn
15	Mueller (Muller) mine	Au
16	Old Well shaft	Sn
17	Rhyne Estate prospect	Sn
18	Swamp shaft No. 1	Sn
19	Tucker, H. C. mine	Au
20-	Upper Mostellar out	Sn
21		
22		
23		!
24		

1	McDowell County	
2	Cane Creek placers	Au
3	Dobson (Dodson's, Cedar Cove) mine	Pb
4	Hunt's Mountain (Huntsville) mine	Au
5-	Kirksey's mine	Pb
6	Linville Caverns prospect	Pb, Zn
7	Marion Bullion Company (Brackettown,	
8	Granville) mine	Au
9	North Fork Creek prospect	Pb, Zn
10-	Queen mine	Pb
11	South Muddy Creek placers	Au
12	Sprouse mine	Au
13	Vein Mountain mine	Au
14	Macon County	
15	Ammons Branch (Horse Cove) placer	Au
16	Buck Creek prospect	Cu
17	McGuire (Taylor) prospect	Cu
18	Mica City Creek prospect	Cu
19	Otto (Care, Little Tennessee, Macon)	
20-	mine	Cu
21	Patton (Nantahala) mine	Cu
22	Skeenah Creek prospect	Cu
23	Sugartown River place	Au
24	Waldrope property Watauga prospect Whiteners Valley placer	Cu Cu Au

 $\gamma=1$  , S. GOVERNMENT PRO  $\gamma=\gamma$  OFFICE (1981) O -  $\gamma(11)$  .

ì		
1	Madison County	
2	Betts, A. G. mine	Ba.
3	Gahagan mine	Ва
4	Klondyke mine	Ba
5	Long Mountain mines	Ba
6	Mine Ridge prospect	Ba
7	Spring Creek mine	Ba.
8	Stackhouse (Defender, Martha, Nettie,	
9	Sandy Bottom) mine	Ba
10-	Mecklenburg County	
11	Abernathy, Clem mine	Au
12	Alexander (Chapman) mine	Au
` 13	Alexander, Amos mine	Au
14	Alexander, Martin mine	Au
15—	Alexander, Morehead mine	Au
16	Arlington mine	Au
17	Bane mine	Au
18	Barringer mine	Au
19	Beaver mine	Au
20-	Bennett mine	Au
21	Black (Z. V. Teeter) mine	Au
22	Black Cat mine	Au
23	Blake mine	Au
24	Brafford mine	Au
•	Brawley mine	Au

1. S. COVERSMENT OR . OFFICE: 1959 O = 50.

867-

1	Brown mine	Au
2	Burnett mine	Au
3	Caldwell (Craig-Davidson) mine	Au
4	Campbell mine	Au
5 —	Capps (Capps Hill) mine	Au
6	Carson mine	Au
7	Cathey mine	Au
8	Cathey, Green C., mine	Au, Cu
9	Champion (Zeb Teeter) mine	Au
10-	Charlotte mine	Au
11	Chinquepin mine	Au
12	Clark mine	Au
13	Crosby mine	Au
14	Crump mine	Au
15	Davidson mine	Au
16	Dudley mine	Au
17	Dunlop (Mole Hill) mine	Au
18	Dunn mine	Au
19	Dunn, W. L. mine	Au
20-	Ellington (Blair, Hard Hill) mine	Au
21	Elliotte Brothers prospects	Au
22	Empire mine	Au
23	Ferguson Hill mine	Au
24	Ferris (Faires, Garris) mine	Au
	Ferris, Tom mine	Au

1	Frazer mine	Au
2	Frederick mine	Au
3	Gibson	Au
4	Gold Hill mine	Au
5	Griffith (Bryant Park) property	Au
c	Hayes mine	Au
7	Helms, Mrs. John mine	Au
8	Henderson mine	Au
9	Henson, Pat mine	Au
1%	Hipp (Hipps) mine	Au
11	Hood mine	Au
12	Hoover (Rhyne) mine	Au
13	Hoover, Bob mine	Au
14	Hoover, Jas. (McCall) mine	Au
15	Hopewell (Kerns, Kearns) mine	Au
16	Hovey mine	Au
17	Howell mine	Au
18	Hunter (Dr. Hunter) mine	Au
19	Hunter, A. H. mine	Au
26	Hunter, John P. (Elwood) mine	Au
21	Hunter, S. H. mine	Au
22	Isenhour (Yellow Dog) mine	Au
23	Johnson mine	Au
24	Jordan mine	Au
•	Juggernaut mine	Au

1. S. CVERNARDIE OF

OFFICE LANGE OF SUL

1		
1	King Solomon mine	Au
2	McCleary (McLeary, Williams) mine	Au
3	McCombs mine	Au
4	McCord mine	Au
5-	McCorkle mine	Au
6	McDonald mine	Au
7	McGee mine	Au
8	McGinn mine	Au
9	McLean mine	Au
10-	Maxwell (Hagler) mine	Au
11	Mayberry mine	Au
12	Means (Mears) mine	Au
13	Moore mine	Au
14	Neal, F. S. mine	Au
15	Neal, T. G. mine	Au
16	Newell mine	Au
17	Nolan mine	Au
18	Orr, R. B. mine	Au
19	Parks mine	Au
20-	Pharr mine	Au
21	Plummer mine	Au
22	Plummer Charles mine	Au
23	Point mine	Au
24	Poplin mine	Au
	Prim mine	Au

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,		
1	Providence mine	Au
2	Pruitt mine	Au Au
3	Queen mine	Au
4	Queen of Sheba mine	Au
5	Ray (Rhea, Rea, Baltimore and North	
6	Carolina) mine	Au
7	Rogers mine	Au
8	Roswell mine	Au
9	Rudisil mine	Au
10-	St. Catherine (Charlotte, McCombs)	
11	mine	Au
12	Shaffer mine	Au
13	Simpson mine	Au
14	Sloan mine	Au
15	Smith and Palmer mine	Au
16	Stearns mine	Au
17	Stewart (Stuart) mine	Au
18	Stinson mine	Au
19	Summerville mine	Au
20-	Sumner (Carson, McClure) mine	Au ·
21	Surface Hill (Harris) mine	Au
2 <b>2</b>	Taylor mine	Au
23	Todd mine	Au
24	Trautman (Troutman) mine	Au
	Tredinick mine	Au

	Muselton mine	A
1	Trotter mine Vista mine	Au Au
2		
3	Walker mine	Au
4	Wilhelmina mine	Au
5-	Wilson, A. J. mine	Au
6	Wilson, Frank mine	Au
7	Wilson, Stephen mine	Au
8	Woolworth (Woodruff, Grier) mine	Au
9	Mitchell County	
10	Lick Ridge mine	Cu
11	Montgomery County	
12	Appalachian (Coggins, Rich Cog)	
13	mine	Au
14	Beaver Dam mine	. Au
15—	Black Ankle mine	Au
16	Bright mine	Au
17	Buck Mountain mine	Au
18	Bunnell mine	Au
19	Carter mine	Au
20—	Coggins, Sallie mine	Au
21	Crump mine	Au
22	Curry mine	Au
23	Dark Springs mine	Au
24	Deep Flat mine	Au
	Dry Hollow mine	Au

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1954 () = 5 11 .

Tatchmum's Creek mine	Au
Elitorado mine	Au,Cu,Pb,Zn
Eiry (Hade) mine	Au
Pelconda mine	Au
Told mine, name unknown	Au
Fold prospect, name unknown	Au
Grandman mine	Au
Griffin mine	Au
b Harvin mine	Au
Henderson mine	Au, Cu, Pb, Zn
Iola mine	Au
Island Creek mine	Au
Martha Washington mine	Au
Montgomery (Uwarra) mine	Au
Moore mine	Au
Moratock mine	Au
Morris Mountain (Davis, Dutton)	
Ophir) mine	Au
Nall mire	Au
Ophir (Davis) mine	Au
Pear Tree Hill mine	Au
Reynolds mine	Au
Riggon Hill mine	Au
Russell (Palmer, Peebles) mine	Au
Sam ('hristian mine	Au

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T. S. MOVERDAND R.

1	Sedberry mine	Au
2	Spanish Oak Gap mine	Au
3	Star (Union Refining and Mining	
4	Co.) mine	Au
5 –	Sted mine	Au
b	Steel and Saunders mine	Au
7	Swift Creek mine	Au
8	Tom's Creek (Tone's Creek) mine	Au
9	Troy mine	Au
10 -	Troy prospect	Pb, Zn
11	Worth mine	Au
12	Moore County	·
13	Alden and Merrill mine	Au
14	Allen mine	Au
15	Bat Roost mine	Au
16	Bell (Belle) mine	Au
17	Brown mine	Au
18	Burns (Alred, Burns and Alred) mine	Au
19	Cagle (Laurel Hill, Hancock, Talc)	L
.20 —	mine	Au
21	California mine	Au
-12	Cameron placer	Au
	Cheek mine	Au, Cu, Pb
	Clegg mine	Au
	Donaldson (Cotton) mine	Au
	-	

tion is smith to the

1	Dry Hollow mine	Au
2	Elise (Elsie) mine	Au
3	Grampusville (Grampus) mine	Au
4	Haw Branch Road mine	Cu
5-	Jackson mine	Au
6	Jenkins mine	Au
7	Laufman mine	Au
8	Monroe mine	Au
9	Moody mine	Au
10-	Red Hill mine	Au
11	Richardson mine	Au
12	Ritter (McDonald, Teisson) mine	Au
13	Sewell mine	Au
14	Shields mine	Au
15	Wright mine	Au
16	Nash County	
17	Argo mine	Au
18	Arrington mine	Au
19	Conyers mine.	Au
20-	Mann-Arrington mine	Au
21	Woodward-Hedgepant tract	Au
22		
23		
24		
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U. S. COVERNATING OF

i		
1	Orange County	
2	Fawcett, J. B. mine	B <b>a</b>
3	Latta mine	Ba.
4	Patterson mine	Au
5-	Robeson mine	Au
6	Person County	
7	Arringdale mine	Cu
8	Buckeye mine	Cu
9	Copper King mine	Cu
10-	Copper World mine	Cu
11	Cross-Cut mine	Cu
12	Duke (Tingen) mine	Cu
13	Durgy (Person Consolidated, Yancey)	
14	mine	Cu
15	Durgy prospects	Au
16	Engle prospect	Cu
17	Gillis mine	Cu
18	Mill Creek mine	Cu
19	Northeast shaft	Cu
20-	Poole mine	Cu
21	Thomas mine	Cu
22	Thomas mine, prospect south of	Cu .
23		
24		

U. S. GOVERNAGATION . . . OFFICE: (1989 O -  $\phi_{\rm eff}$  .

1	Polk County		
2	Abrams, Pattie mine	. Au	
3	Adams mine	Au	
4	Arms, Tom mine	Au	
5	Carpenter mine	Au	
6	Davis mine	Au	
7	Double Branch mine	Au	
8	Hamilton mine	Au	
9	Lilian mine	Au	
10-	MacIntire mine	Au	
11	Mills, L. A. mine	Au	
12	Morris mine	Au	
13	Neal mine	Au	
14	Ponder mine	Au	
15—	Prince (Price) mine	Au	
16	Red Spring mine	Au	
17	Riding mine	Au	4
18	Smith mine	Au	
19	Splawn mine	. Au	
20-	Wetherbee mine	Au	
21	Randolph County		
22	Allred (Burns, Overton, Randolph)		
23	mine	Au	
24	Bosun mine	Au	
-	Branson mine	Au	•

List GOVERNMANT OF

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OPTICE: 1959 O - Str. .

-		
1	Cameron Mountain mine	Au
2	Coburn mine	. Au
3	College mine	Cu
4	Cotts, J. H. mine	Au
5-	Davis Mountain (Dorrs Hill,	
6	McAllister, Conroy) mine	Au
7	Delft (Delph, Lytton, Empire,	
8	Miller, Brown Hill) mine	Au
9	Dowd (Rush) mine	Au
10-	Garland Prichard mine	Au
11	Gluyas mine	Au
12	Gold Bowl (Pugh) mine	Au
13	Goliham (Goliharn, Smith) mine	Au
14	Gray mine	Au
15	Griffin mine	Au
16	Harney mine	Au
17	Hill (Talbert) mine	Au
18	Hoover Hill mine	Au
19	House (McGrew) mine	Au
20-	Jones (H & G, Asheboro, County	
21	Home) mine	Au
22	Jones-Keystone mine	Au
23	Lafflin (Laughlin, Herring) mine	Au
24	Laughlin, John mine	Au
	Lowdermilk (McAdoo) mine	Au

4 1. S. GOVERNMENT PR

52

OFFICE: () of O + or .

Merrill mine	Au
Newby (Newberry) mine	Au
New Sawyer (Ross, Powell) mine	Au
Parish (Kindley, Kismet) mine	Au
Pee Dee (Spoon) mine	Au
Pierce Mountain mine	Au
Pine Hill mine	Au
Porter (Johnson, Pilot Mountain)	
mine	Au
Prichett mine	Au
Redding mine	
Robbins mine	Au
Sawyer mine	Au
Scarlet mine	Au
Senter mine	Au
Slack mine	Au
Southern Homestake mine	Au
Spencer (Copple, Ruth) mine	Au, Cu
Stafford mine	Au
Vharrie (Vharie, Vwharrie) mine	Au
Wilson Kindley mine	Au
WinningMam mine	Au
Winslow mine	Au
Rockingham County	
Lindsay's, W. mine	Au
	Newby (Newberry) mine  New Sawyer (Ross, Powell) mine  Parish (Kindley, Kismet) mine  Pee Dee (Spoon) mine  Pierce Mountain mine  Pine Hill mine  Porter (Johnson, Pilot Mountain)  mine  Prichett mine  Redding mine  Robbins mine  Sawyer mine  Soarlet mine  Senter mine  Slack mine  Southern Homestake mine  Stafford mine  Uharrie (Yharie, Ywharrie) mine  Wilson Kindley mine  Winslow mine  Rockingham County

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OFFICE: 1959 O - 5011 .

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		·
1 1	Rowan County	
2	Atlas mine	. Au
3	Bame (Graf, Holshouser, Holtshauser,	
4	Jacob) mine	Au
5 —	Bringle mine	Au
ô	Bullion mine	Au
7	Cady mine	Au
8	Camp Ridge mine	Au
9	Cope mine	Au
10-	Davidson and Wilson mine	Au
11	Dunns Mt. mine	Au
12	Dutch Creek mines	Au
13	Gold Coin mines	Au
14	Gold Hill (Randolph, Miller,	
15	Barnhardt, North, WGN, Myers)	
16	mine	Au
17	Gold Know mine	Au
18	Goodman mine	Au
19	Grupy mine	Au .
20—	Harrison mine	Au
21	Hartman mine	Au
22	Haynes mine	' Au
23	Hill mine	Au
24	Howard mine	Au
	Hunnicutt (Union Copper) mine	Au, Cu

1. 3. GOVERNMENT 39

1	Kistler mine	Au
2	Morgan mine	. Au
3	Negus mine	Au
4	New Discovery mine	Au
5-	Old Field mine	Au
6	Parks mine	Au
7	Randleman mine	Au
8	Reimer (Rymer) mine	Au
9	Roseman mine	Au
10-	Rumple (Rumpler) mine	Au, Cu
11	Snider mine	Au
12	Southern Belle mine	Au
13	Southern Copper and Gold Mining Co.	
14	mine	Au
15-	Standard mine	Au
16	Steele mine	Au
17	Townsend mine	Au
18	Tuxler (Drexler) mine	- Au
19	Varnadore prospect	Au
20-	Yadkin (Tuck) mine	Au
21	_	
22		
23	,	
24		
'		

\* U.S. GOVERNMENT PR

OFFICE: 1959 O - 511. .

Rutherford County  Alta (Monarch, Idler, Carson, Glen- dale) mine Au  Biggerstaff mine Au  Camble mine Au  Gamble mine Au  Golden Valley placers Au  Grayson mine Au  Lawson Smart mine Au  Leeds mine Au  Melton mine Au  Sandy Level Church prospect Au  Shemwell mine Au  Shemwell mine Au  Wolverine mine Au  Wolverine mine Au  Stanley County  Barringer mine Au  Crewford (Ingram) mine Au  Crowell mine Au  Crowell mine Au  Crowell mine Au  Crowell mine Au  Au  Crowell mine			
dale) mine  dale) mine  Biggerstaff mine  Au  Biggerstaff mine  Au  Gamble mine  Gamble mine  Au  Golden Valley placers  Au  Grayson mine  Au  Jones mine  Lawson Smart mine  Au  Leeds mine  Au  Leeds mine  Au  Sandy Level Church prospect  Au  Shemwell mine  Au  Shingle Hollow Road prospect  Twitty, J. D. mine  Wolverine mine  Au  Stanley County  Barringer mine  Au  Crawford (Ingram) mine  Au  Crawford (Ingram) mine  Au  Crawford (Ingram) mine  Au  Au  Crawford (Ingram) mine	1	Rutherford County	
Biggerstaff mine Au  Ellwood (Elwood) mine Au  Gamble mine Au  Golden Valley placers Au  Greyson mine Au  Jones mine Au  Lawson Smart mine Au  Leeds mine Au  Melton mine Au  Sandy Level Church prospect Au  Shemwell mine Au  Shingle Hollow Road prospect Pb  Twitty, J. D. mine Au  Wolverine mine Au  Stanley County  Barringer mine Au  Cotton Patch mine Au  Crawford (Ingram) mine Au  Crawford (Ingram) mine Au	2	Alta (Monarch, Idler, Carson, Glen-	,
Ellwood (Elwood) mine  Gamble mine  Gamble mine  Golden Valley placers  Au  Grayson mine  Au  Jones mine  Lawson Smart mine  Leeds mine  Au  Leeds mine  Au  Sandy Level Church prospect  Au  Shemwell mine  Shingle Hollow Road prospect  Twitty, J. D. mine  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Crawford (Ingram) mine  Au  Au  Crawford (Ingram) mine	3	dale) mine	Au
Gamble mine  Gamble mine  Golden Valley placers  Au  Greyson mine  Au  Jones mine  Lewson Smart mine  Au  Leeds mine  Au  Sandy Level Church prospect  Au  Shemwell mine  Shingle Hollow Road prospect  Twitty, J. D. mine  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Crawford (Ingram) mine  Au  Au  Crawford (Ingram) mine	4	Biggerstaff mine	Au
Golden Valley placers  Grayson mine  Jones mine  Lawson Smart mine  Leeds mine  Au  Leeds mine  Au  Sandy Level Church prospect  Au  Shemwell mine  Au  Shingle Hollow Road prospect  Twitty, J. D. mine  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Au  Au  Crawford (Ingram) mine  Au  Au  Au  Au  Crawford (Ingram) mine	5 —	Ellwood (Elwood) mine	Au
Greyson mine  Greyson mine  Jones mine  Lewson Smart mine  Leeds mine  Leeds mine  Au  Leeds mine  Au  Sandy Level Church prospect  Au  Shemwell mine  Shingle Hollow Road prospect  Fb  Twitty, J. D. mine  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Crawford (Ingram) mine	6	Gamble mine	Au
Jones mine  Lawson Smart mine  Leeds mine  Au  Leeds mine  Au  Melton mine  Sandy Level Church prospect  Au  Shemwell mine  Shingle Hollow Road prospect  Pb  Twitty, J. D. mine  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Au  Crawford (Ingram) mine	7	Golden Valley placers	Au
Lewson Smart mine  Lewson Smart mine  Au  Leeds mine  Au  Melton mine  Sandy Level Church prospect  Au  Shemwell mine  Shingle Hollow Road prospect  Pb  Twitty, J. D. mine  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Au  Crawford (Ingram) mine	8	Grayson mine	Au
Leeds mine  Au  Melton mine  Au  Sandy Level Church prospect  Au  Shemwell mine  Shingle Hollow Road prospect  Pb  Twitty, J. D. mine  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Crawford (Ingram) mine	9	Jones mine	Au
Melton mine  Sandy Level Church prospect  Au  Shemwell mine  Shingle Hollow Road prospect  Pb  Twitty, J. D. mine  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Au  Au  Crawford (Ingram) mine	10-	Lawson Smart mine	Au
Sandy Level Church prospect  Au  Shemwell mine  Shingle Hollow Road prospect  Pb  Twitty, J. D. mine  Au  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Au  Crawford (Ingram) mine	11	Leeds mine	Au
Shemwell mine  Shingle Hollow Road prospect  Pb  Twitty, J. D. mine  Au  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Au  Crawford (Ingram) mine	12	Melton mine	Au
Shingle Hollow Road prospect Pb Twitty, J. D. mine Au Wolverine mine Au Stanley County Barringer mine Au Cotton Patch mine Au Crawford (Ingram) mine Au	13	Sandy Level Church prospect	Au
Twitty, J. D. mine  Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Au  Au  Au  Au  Au	14	Shemwell mine	Au
Wolverine mine  Stanley County  Barringer mine  Au  Cotton Patch mine  Au  Crawford (Ingram) mine  Au  Au  Au	15	Shingle Hollow Road prospect	Pb
Stanley County  Barringer mine  Cotton Patch mine  Crawford (Ingram) mine  Au  Au  Au  Au  Au	16	Twitty, J. D. mine	Au
Barringer mine  Au  Diles mine  Cotton Patch mine  Crawford (Ingram) mine  Au  Au	17	Wolverine mine	
20- Biles mine Au  21 Cotton Patch mine Au  22 Crawford (Ingram) mine Au	18	Stanley County	
Crawford (Ingram) mine  Cotton Patch mine  Au  Au	19	Barringer mine	Au
Crawford (Ingram) mine Au	20-	Biles mine	Au
	21	Cotton Patch mine	Au
Crowell mine Au	22	Crawford (Ingram) mine	Au
	23	Crowell mine	Au
Eudy mine Au	24	Eudy mine	Au
Fesperman mine Au		Fesperman mine	Au

U.S. COVERNMONT DE

OFFICE: 1999 O + 915

<del></del>		
1	Flint Springs mine	Au
2	Freehold mine	Au
3	Haithcock mine	Au
4	Hearne (Herne) mine	Au
5 —	Henderson mine	Au
6	Kimball Hill mine	Au
7	Little Fritz (Culp) mine	Au
8	Lowder mine	Au
9	Mumford mine	Au
10-	Parker mine Parker, Johnny mine	Au <b>A</b> u
11	Thompson mine	Au
12 Su	rry County	
13	Chatham, R. N. mine	Au
14	Moseley's Farm prospect	Au
15- Sw	ain County	
16	Calhoun prospect	Cu
17	Fontana mine	Cu
18	Hazel Creek (Adams, Everett) mine	Cu
19	Locust Gap prospect	Cu
20-	Oconaluftee River	Au, Pb
21	Silers Bald prospect	Cu
22	Westfeldt prospect	Cu, Zn
23		
24		
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538

OFFICE: 1959 O - 5411 1

867-1.

	A STATE OF THE STA	
1	Union County	·
2	Black mine	Au
3	Bonnie Belle (Washington) mine	Au
4	Brown Hill mine	Au
5	Butterfield mine	Au
ő	Crowell (Bright Light) mine	Au
7	Crump mine	Au
8	Davis mine	Au
9	Dulin mine	Au
10-	East Hill mine	Au
11	Folger Hill mine	Au
12	Ford mine	Äu
13	Fox Hill (Fag Hill) mine	Au
14	Fulwood mine	Au
15	Grand Union Gold mine	Au
16	Harkness mine	, Au
17	Hemby mine	Au
18	Hemby, Thomas mine	Au
19	Howie (Colossus, Lawson) mine	Au
20—	Lemmonds (Lemons, Marion) mine	Au ·
21	Lewis mine	Au
22	Long mine	Au
23	McClarty mine	· Au
24	McNeely mine	Au
	Moore mine	Au

1, S. GOVERNMENT 1991 | 1 OFFICE: 1959 O - 5117 . 867-1

·**5**39

1	Moore Hill mine	Au
2	Nesbitt mine	Au
3	New South mine	Au
4	Ore Hill mine	Au
5	Penman mine	Au
6	Pewter mine	Au
7	Phifer (Phiffer, Price, Mint Hill)	
8	mine	Au
9	Phifer, Henry mine	Au
10-	Phifer, Sam mine	Au
11	Putnam (Stearns) mine	Au
12	Rogers, Grady mine	Au
13	Rogers, Wiley mine	Au
14	Secrest mine	Au
15—	Smart (Bonnie Doon) mine	Au
16	Stewart mine	Au
17	Strothers (Ruben Boswell) mine	Au
18	Wenona mine	Au
19	Wyatt (Wiatt, Vinson's Half Acre)	
20—	mine	Au '
21	Vance County	
22	Hamme mine	W
23	Wake County	·
24	Cary, prospect southeast of	Co

,		
1 Warren County		
2	Alston mine	Au
Watauga County		
4	Beech Mountain mine	Pb, Ag
5-	Elk Knob mine	<b>C</b> u
6	Grandfather Mountain mine, north	
7	side	Au
8	Hardin's mine	Au
9	Howard Creek placers	Au
10-	Miller mine	Cu
Wilkes County		
12	Bryan's Gap (Trap Hill) mine	Cu, Au
13	Flint Knob mine	Au, Pb
14	Mount Zion mine	Au
15-	Roaring River placer	Au
Yadkin County		
17	Dixom mine	Au
18	Gross mine	Au
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